CUMBERLAND COUNTY COUNCIL.

ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH,

F. H. MORISON, M.D., D.P.H.

FOR THE YEAR 1931.

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1932.

CUMBERLAND COUNTY COUNCIL.

To the Cumberland County Council.

Mr. Chairman, Ladies and Gentlemen,

I regret that this, my twenty-fourth and last, Annual Report on the Health of the Administrative County, is not such a favourable one, as has been presented to you during several years past.

Although there was no marked epidemic sickness, the year 1931 was characterised almost throughout by an unusual amount of sickness, which, of course, is reflected in higher death rates from most conditions.

In this Report I have refrained, for obvious reasons, from making any comment as to future policy. Needless to say, there are many and very pressing problems with which the County Council is faced in dealing with the health administration of the County, not the least of which are those imposed by the Local Government Act, 1929.

May I take this opportunity to say how very much I appreciate the kindness, consideration and help I have received from the County Council as a whole, and especially from those members with whom I was naturally most closely associated, the members of the Health Committee.

I would also like to put on record how much I owe to all members of my staff, past and present, medical, nursing and clerical, for the loyal help they have always so readily and willingly given.

I remain,
Ladies and Gentlemen,
Yours obediently,
F. H. MORISON,
County Medical Officer of Health.

STATISTICS AND SOCIAL CONDITION OF THE AREA.

Area (In Acres).

The area of the Administrative County, as given in the Census returns of 1931, is 968,598 Acres. The Municipal Boroughs (2) and Urban Districts (12), 62,133 acres; the Rural Districts (9), 906,465 acres.

Population.

	At 1921 Census.	Estimated by Registrar-General 1931.	At 1931 Census.
Urban Districts ...	121,340 ...	114,300	114,459.
Rural Districts ...	99,123 ...	90,970	91,331.
Administrative County	220,463 ...	205,270	205,790.

The physical features and general character of the County, also the social conditions, including the chief occupations of the inhabitants, were all fully dealt with in my Survey Report for 1925, and as no noteworthy alteration has taken place, it is unnecesary to repeat them here.

EXTRACTS FROM VITAL STATISTICS FOR THE YEAR 1931.

Live Births.	Total.	Males.	Females.
Legitimate ...	3,367 ...	1,736 ...	1,631
Illegitimate ...	222 ...	128 ...	94

Birth-rate per 1,000 of population, 17.4.

Still Births.			
Legitimate ...	145 ...	87 ...	58
Illegitimate ...	16 ...	10 ...	6

The proportion of still births per 1,000 legitimate births is 42; whilst that of illegitimate births is 72.

The rate of still births per 1,000 total births is 44.8.

Deaths.	Total.	Male.	Female.
	2,813 ...	1,453 ...	1,360

Death-rate per 1,000 of population 13.7.

Deaths from Diseases and Accidents of Pregnancy and Child-birth:—

From Sepsis	3
From Other Causes	16

Maternal Death-rate per 1,000 births, 5.07.

Death-rate of Infants under one year of age:—

All infants per 1,000 living births	72
Legitimate infants per 1,000 legitimate live births	68
Illegitimate infants per 1,000 illegitimate live births	135
Deaths from Measles (all ages)	20
Deaths from Whooping Cough (all ages) ...	19
Deaths from Diarrhœa (under 2 years of age)...	15

GENERAL PROVISION OF HEALTH SERVICES FOR THE AREA.

1. Public Health Officers of the Authority, 1931.

(TWENTY-NINE), (29)

	Whole-time.	*Appointed.*
F. H. Morison, M.D., D.P.H. ...	County Medical Officer of Health ...	1908
Kenneth Fraser, M.D., F.R.S.E., D.P.H., D.T.M. & H. ...	Deputy Do. ...	1912
Mark S. Fraser, M.D., D.P.H., F.R.C.S.E. ...	Senior Assistant Do. ...	1914
A. C. B. Mc.Murtrie, M.C., M.D., D.P.H., F.R.C.S.E. ...	Venereal Diseases Officer, Assistant M.O.H. ...	1920
Arthur H. Towers, M.B., Ch.B., D.P.H., B.Hy. ...	Assistant M.O.H. ...	1921
H. C. Simpson, L.M.S., S.A., D.P.H. ...	Do. ...	1926
I. Spedding Jones, M.R.C.S., L.R.C.P., D.P.H. ...	Do. ...	1930

Part-time.

R. W. Macpherson, M.D., D.P.H. ...	Part-time Tuberculosis Officer
C. A. Mason, M.B., Ch.B., D.P.H. ...	Part-time Tuberculosis Officer

Name.	*Qualifications.*
King, Alice Beatrice ...	4 years Hospital St. George's, London; 2 years Fever Training, Coventry; District and Maternity Training, Shoreditch, St. Mark's Hospital for Fistula, London.
Reid, Jane ...	3 years Hospital — Edinburgh Royal; C.M.B. Certificate; Children's Orphanage, Riversdale-on-Hudson; Presbyterian Hospital, New York, Post-Graduate Course; six months Military Camp Hospital, Mansfield; General Isolation Hospital, Calais, Sister in T.B. Ward six months.
Brownlie, Grace Robertson P. ...	3 years Hospital, West Middlesex; 3 years Cottage Hospital, Blairgowrie; Edinburgh Maternity Hospital, C.M.B. Certificate.

Name.	*Qualifications.*
Johnston, Elizabeth ...	3 years Hospital, C.M.B. Certificate.
Lawson, Elsie Mary ...	3 years Hospital, Brown Cow Hill, Liverpool; C.M.B. Certificate.
Marchbank, Jane Nicnol ..	3 years Hospital; C.M.B.; T.B. experience; Health Visitor and School Nurse Certificate; Staff Nurse and Charge Sister, Military Hospital.
Hind, Ruth J. V. ...	3 years Hospital; Military Hospital experience; Edinburgh Maternity Hospital, C.M.B. Certificate.
Prescott, Margaret Elizabeth ...	3 years' Hospital Training, C.M.B.
Snowden, Lillian Lecturer ...	Resigned—December, 1931.
Nelson, Frances D., After-care Sister (Orthopædics) ...	Liverpool Physical Training College; Massage, Electrical, X-ray, Remedial Exercises, Plaster & Orthopædic Appliances experiences.

Births.

The births registered in the County during the year 1931 numbered 3,589 (1,864 males and 1,725 females), giving a birth-rate of 17.4 per 1,000 of population, compared with 3,610 (1,843 males and 1,767 females), and a rate of 17.2 the previous year.

In the Urban Districts there were 2,117 (1,102 males and 1,015 females), giving a rate of 18.5, and in the Rural Districts 1,472 (762 males and 710 females), giving a rate of 16.1.

The corresponding figures for the previous year were:—Urban Districts, 2,102 births, and a rate of 18.1; and in the Rural Districts, 1,508 births, and a rate of 16.2 per 1,000 of population.

The birth-rate for England and Wales was 16.3. Arranged in the order of their birth-rates the Urban and Rural Districts stand thus:—

Urban Districts.			*Rural Districts.*		
Whitehaven	21.4	(21.9)	Longtown ...	18.5	(16.7)
Holme Cultram	20.0	(17.7)	Wigton	18.4	(18.8)
Arlecdon and Frizington	19.8	(16.6)	Brampton ...	17.2	(15.0)
Egremont ...	19.3	(18.2)	Bootle	16.7	(12.5)
Workington	19.1	(17.7)	Penrith	16.3	(17.9)
Harrington	18.8	(19.1)	Cockermouth	16.0	(16.3)
Maryport ...	18.8	(18.9)	Alston	15.5	(11.5)
Cleator Moor	18.7	(16.8)	Whitehaven ...	15.5	(16.6)
Millom	17.2	(18.6)	Carlisle	12.9	(15.4)
Cockermouth	16.9	(12.6)			
Wigton	15.6	(18.5)			
Penrith	15.2	(17.6)			
Aspatria	13.2	(12.6)			
Keswick	12.2	(11.9)			

Note.—In all the tables the figures in brackets are those of the previous year.

Illegitimate Births.

The number of illegitimate births was 222: thus 61 per 1,000 of the total number of births were illegitimate, compared with 241 and 66 the previous year.

The rates of illegitimate births per 1,000 of the total births in the various sanitary districts are as follows:—

Urban.			*Rural.*		
Wigton	163	(75)	Longtown	117	(140)
Aspatria	116	(45)	Wigton	113	(63)
Cockermouth ...	98	(84)	Alston	97	(258)
Maryport	83	(64)	Carlisle	89	(61)
Holme Cultram	76	(90)	Brampton ...	81	(129)
Cleator Moor ...	72	(57)	Penrith	65	(42)
Arlecdon and Frizington ...	69	(38)	Cockermouth	64	(78)
Egremont	59	(44)	Whitehaven ...	38	(53)
Millom	47	(65)	Bootle	23	(84)
Whitehaven ...	37	(50)			
Penrith	36	(76)			
Workington ...	35	(43)			
Harrington ...	12	(60)			
Keswick	0	(142)			

In the Urban Districts 53, and in the Rural Districts 74 per 1,000 births were illegitimate, compared with 58 and 78 respectively in the previous year.

Deaths.

The number of deaths registered was 2,813 (1,453 males and 1,360 females). This gives a rate of 13.7 per 1,000 of population, compared with 2,551 (1287 males and 1,264 females), and a rate of 12.2 the previous year.

With one exception (1922) this is the highest death-rate that has been recorded during the past ten years.

The death-rate in England and Wales was 12.3. In the Urban Districts there were 1,625 deaths (866 males and 759 females), giving a rate of 14.2. In the Rural Districts there were 1,188 deaths (587 males and 601 females), giving a rate of 13.0.

The corresponding figures for the previous year were:—Urban Districts, 1,436, and a rate of 12.3; Rural Districts, 1,115, and a rate of 12.0.

Arranged in the order of their death-rates the Urban and Rural Districts stand thus:—

Urban.			*Rural.*		
Cockermouth	18.1	(13.1)	Bootle	17.6	(10.2)
Cleator Moor	16.0	(10.1)	Alston	15.8	(18.2)
Millom	15.6	(12.6)	Brampton ...	14.0	(15.8)
Egremont ...	15.5	(9.0)	Penrith	13.9	(10.7)
Keswick	14.9	(19.0)	Penrith	13.9	(10.7)
Maryport ...	14.9	(12.9)	Carlisle	13.7	(12.5)
Whitehaven	14.4	(12.4)	Wigton	13.6	(13.3)
Arlecdon and Frizington	13.8	(14.2)	Longtown ...	12.2	(11.3)
Harrington	13.7	(9.0)	Cockermouth	11.4	(12.1)
Workington	13.3	(12.9)	Whitehaven	11.2	(9.4)
Penrith ...	13.1	(12.6)			
Wigton	12.8	(13.7)			
Holme Cultram ...	12.6	(11.1)			
Aspatria ...	8.9	(10.6)			

Infant Mortality.

3,589 births were registered, and 261 infants died before they reached the age of one year. The Infant

Mortality was, therefore, at the rate of 72 per 1,000 births, 13 per 1,000 higher than in the previous year.

The rate for England and Wales was 66.

In the Urban Districts there were 2,117 births and 169 infant deaths. The infant mortality rate was, therefore, 79 per 1,000 births, 12 per 1,000 higher than in the previous year.

In the Rural Districts there were 1,472 births and 92 infant deaths, giving an infant mortality rate of 62 per 1,000 births, 14 per 1,000 higher than in the previous year.

It is a significant fact that whilst the infant mortality rate of legitimate infants was 68 per 1,000 births, that of illegitimate infants was 135 per 1,000.

Arranged in the order of their infant mortality rates the Urban and Rural Districts stand thus:—

Urban.			*Rural.*		
Cockermouth	135	(135)	Wigton	88	(69)
Cleator Moor	120	(41)	Whitehaven	72	(46)
Arlecdon and Frizington	116	(89)	Cockermouth	70	(51)
Millom	94	(36)	Carlisle	64	(55)
Aspatria	93	(23)	Brampton	59	(69)
Maryport	93	(78)	Penrith	50	(28)
Keswick	92	(41)	Bootle	46	(42)
Harrington	89	(73)	Longtown	36	(10)
Whitehaven	72	(78)	Alston	Nil	(97)
Wigton	72	(76)			
Workington	67	(72)			
Penrith	65	(63)			
Egremont	59	(53)			
Holme Cultram	32	(23)			

Cancer.

348 deaths were registered as due to Cancer, a rate of 1.6 per 1,000 of population, compared with 326 deaths, and a rate of 1.5 the previous year.

Arranged in the order of their death-rates from Cancer the Urban and Rural Districts stand thus:—

Urban.			*Rural.*		
Egremont	2.6	(1.4)	Bootle	3.4	(1.0)
Harrington	2.6	(0.6)	Alston	2.2	(4.4)
Holme Cultram	2.3	(1.6)	Carlisle	2.1	(1.3)
Workington	2.0	(1.9)	Cockermouth	1.9	(1.3)
Millom	1.9	(1.3)	Penrith	1.8	(1.6)
Wigton	1.7	(0.8)	Brampton	1.5	(2.0)
Maryport	1.6	(1.5)	Whitehaven	1.2	(0.8)
Cockermouth	1.4	(1.7)	Longtown	1.0	(1.3)
Cleator Moor	1.3	(1.1)	Wigton	0.6	(2.0)
Keswick	1.3	(3.1)			
Whitehaven	1.3	(1.1)			
Penrith	1.0	(1.9)			
Arlecdon & Frizington	0.9	(1.9)			
Aspatria	0.6	(2.2)			

In the Urban Districts the death-rate from Cancer was 1.6 per 1,000; 0.1 higher than in the previous year, whilst in the Rural Districts the death-rate was 1.7; 0.2 higher than in the previous year.

Zymotic Diseases.

The diseases usually included under this name are:—Enteric Fever, Measles, Small-pox, Scarlet Fever, Whooping Cough, Diphtheria, and Diarrhœa.

63 deaths were registered from these diseases, compared with 70 the previous year. This gives a rate of 0.3 per 1,000, the same as in the previous year.

Arranged in the order of their death-rates from Zymotic Diseases, the Urban and Rural Districts stand thus:—

Urban.			*Rural.*		
Cleator Moor	1.6	(0.4)	Longtown	0.5	(0.3)
Arlecdon & Frizington	0.4	(0.2)	Cockermouth	0.3	(0.2)
Egremont	0.4	(0.3)	Whitehaven	0.3	(Nil)
Harrington	0.4	(0.9)	Wigton	0.3	(0.3)
Maryport	0.3	(0.3)	Brampton	0.2	(0.1)
Whitehaven	0.3	(0.4)	Carlisle	0.1	(0.3)
Holme Cultram	0.2	(Nil)	Penrith	0.08	(Nil)
Penrith	0.2	(0.1)	Alston	Nil	(Nil)
Workington	0.2	(0.8)	Bootle	Nil	(Nil)
Millom	0.1	(0.4)			
Aspatria	Nil	(0.2)			
Cockermouth	Nil	(0.4)			
Keswick	Nil	(Nil)			
Wigton	Nil	(0.5)			

Respiratory Diseases.

From these diseases—principally Bronchitis and Pneumonia—there were 352 deaths, compared with 282 the previous year.

The death-rate in the Administrative County from these diseases was 1.7 per 1,000 of population, compared with 1.3 the previous year.

In the Urban Districts the rate was 2.0 per 1,000 against 1.6, and in the Rural Districts the rate was 1.3 against 1.0 in the previous year.

Arranged in the order of their death-rates from Respiratory Diseases the Urban and Rural Districts stand thus:—

Urban.			*Rural.*		
Millom	3.5	(1.9)	Brampton	2.2	(1.1)
Cleator Moor .	2.7	(1.3)	Whitehaven ..	1.9	(1.3)
Arlecdon & Frizington .	2.5	(2.3)	Alston	1.8	(1.5)
Whitehaven ..	2.5	(1.6)	Cockermouth .	1.2	(1.1)
Maryport	2.4	(1.8)	Bootle	1.1	(1.0)
Harrington ...	2.1	(1.1)	Carlisle	1.1	(0.8)
Cockermouth .	2.0	(0.8)	Longtown	1.0	(1.1)
Keswick	1.8	(1.9)	Penrith	1.0	(0.6)
Penrith	1.7	(1.4)	Wigton	0.8	(1.0)
Aspatria	1.5	(0.8)			
Egremont	1.4	(1.4)			
Wigton	1.4	(1.1)			
Workington ..	1.1	(1.8)			
Holme Cultram	0.8	(1.2)			

Nursing in the Home.

In addition to the whole-time staff of nine Health Visitors, the County Council works in close co-operation with the Cumberland Nursing Association, the West Cumberland Nursing Association, the Farlam and Midgeholme Nursing Association, and the Alston Nursing Association.

The Nurses of these Associations, by-arrangement, do any work required by the County Council, such, for instance, as work coming within the scope of the Maternity and Child Welfare Scheme, visiting special cases when necessary, &c.

No provision is made for nursing Infectious Diseases in their own homes. The Nursing Staff of all the Associations is debarred by their rules from nursing infectious cases.

Midwives.

There were at the end of 1931, 97 Midwives on the roll.

One midwife practising in Cleator Moor is subsidised by the County Council.

The number of notices received under Rule 23 of the Central Midwives Board is as follows:—

Medical Help	596
Still-births	21
Liable to be a source of infection	26
Artificial feeding	27
Laying out dead body	35

National Health Insurance.

So far as Tuberculosis is concerned, very close co-operation exists between private practitioners (whether insurance practitioners or not). Every facility is afforded for consultation between practitioners and the tuberculosis staff of the County Council.

There are many directions in which, in my opinion, co-operation could and should be extended, co-operation which would be of marked benefit alike to the panel patients, the practitioners, and the Approved Societies.

I suggest that there are three essentials at which co-operation should aim:—

1. The mass of medical information collected and tabulated by the School Medical Service, of school children between the ages of 5 and 14 should in some way be made available for the use of practitioners who care to have it, and under whose care the ex-school child will be during its adolescent and often its adult life.

It would, for example, be of immense advantage for a medical man to know that an expectant mother had been classified during her school life as a rickety child. Rickets in early childhood does not necessarily leave outward and visible signs of its previous existence. It may be, and often is, only discovered during an ante-natal examination, or when labour is actually in progress, and

it is then found, for the first time, that a child cannot be born " per vias naturiales."

Previous knowledge would save many mothers an infinite amount of suffering and risk to their lives.

Examples of the advantages to the patients of such information could be extended almost indefinitely.

2. The immense advantage to a practitioner of having a carefully compiled medical history extending over the most critical years of a child's life of practically every one admitted on to his panel, can hardly be overstated.

3. The advantages to the Approved Societies are not so obvious, but it must be clear to those who have thought of the subject, that with a clear medical history in front of him, it would be, in many instances, possible for the panel practitioner to prevent certain conditions, and to anticipate possible complications of certain illnesses, and thus cut short the period during which a panel patient would be receiving sickness benefit.

I suggest that it would be a benefit alike to the patient and the Approved Society if it became necessary for every member applying to be put on any doctor's panel, to be medically examined before admission. In this way the commencement of many serious illnesses would be detected, and steps could be taken to prevent matters becoming worse.

Is it too much of a counsel of perfection to suggest that every panel patient should submit himself or herself to medical examination at least every year?

Poor Law Medical Out-Relief.

Medical Officer.	District.	Population.
Dr. Thomson, G. H., Longtown	... Bellbank and District	... 1,701
Dr. Robertson, D., Longtown	... Arthuret and District	... 4,702
Dr. Nelson, L. D., Brampton	... Askerton and District	... 8,876
Dr. Lamberton, J., Carlisle	... Cummersdale & District	... 8,727
Dr. Walters, A. P., Burgh	... Beaumont and District	... 1,265
Dr. Shearer, C. G., Dalston	... Dalston and Orton	... 2,145
Dr. Dalgetty, W. S., Alston	... Alston with Garrigill	... 3,344
Dr. Mactavish, A. S., Penrith	... Catterlen and District	... 9,767
Dr. Sachs, J. H., Penrith	... Culgaith and District	... 1,628
Dr. MacGillivray, A. G., Southwaite.	... Ainstable and District	... 2,137
Dr. Robinson, H. J., Kirkoswald	... Croglin and District	... 2,904
Dr. Mellor, John, Penrith	... Berrier and District	... 4,151
Dr. Dolan, E. M., Wigton	... Aikton (part) & District	... 6,728
Dr. Rankin, A. K., Aspatria	... Aspatria and District	... 7,901
Dr. Macquarrie, I., Mealsgate	... Boltons and District	... 2,521

Medical Officer.	District.	Population.
Dr. Messenger, T. (Deceased), Kirkbride.	Aikton (part) & District...	2,357
Dr. Crerar, C., Silloth	Holme Abbey & District...	4,720
Dr. Abraham, A., Cockermouth	Broughton and District ...	8,166
Dr. Govan, G., Cockermouth	Bewaldeth & District ...	4,461
Dr. Clark, R. L., Maryport	Allerby and District ...	18,061
Dr. Fletcher, I., Workington	Camerton and District ...	31,412
Dr. Burnett, J. R., Keswick	Above Derwent and District ...	9,055
Dr. Maxwell, V. W., Whitehaven	Whitehaven & District ...	22,502
Dr. Cullen, G. R. Harrington	Harrington & District ...	9,118
Dr. Eaton, W. S., Cleator Moor	Cleator ...	8,291
Dr. Logan, P., Whitehaven	Arlecdon and District ...	6,820
Dr. Mitchell, B., Egremont	Egremont and District ...	10,269
Dr. Richmond, R. T., Seascale	Ponsonby and District ...	3,077
Dr. Brown, R. S., Bootle	Bootle and District ...	1,810
Dr. Todd, R., Millom	Millom and District ...	10,178
Dr. Johnston, W. A., Ravenglass	Muncaster and District ...	1,996

Laboratory Facilities.

Every facility is now offered by the Pathological Department of the Cumberland Infirmary, where a complete stock of all types of serum and anti-toxin, likely to be required in emergency, is kept.

Hospitals.

In Circular 1119, which deals with the contents and arrangements of the Annual Report of Medical Officers of Health for 1930, it is stated:—"The Medical Officer of Health should endeavour to deal with all the hospital services, public or voluntary, within or without the area, which are used by the inhabitants of the area."

The problem of hospital accommodation is such an important and pressing one that I thought it would be better dealt with in a Special Report. I, therefore, in February, 1931, submitted an interim report on: "The medical aspects of the Local Government Act, 1929, with special reference to the problem of Hospital Accommodation in Cumberland."

This was followed, on instructions from the Special Committee, which considered the first report, in May by a further report, in which various suggestions as to hospital provision were made.

These two reports deal with all Hospital Accommodation, voluntary as well as public, available in Cumberland, and contain, I think, all the information, including a statement of Ambulance facilities, asked for in Circulars 1119 and 1206 of the Ministry of Health.

To complete the series, in December, 1931, I submitted to your Health Committee a Special Report on "The Provision of Hospital Accommodation for Infectious Diseases."

I do not, therefore, think it is necessary to deal further with Hospital Accommodation in this report.

Maternity and Child Welfare.

Notification of Births.

The number of births notified in accordance with the Notification of Births Acts was 2,436.

The total number of births registered in the Administrative County, apart from the Boroughs of Whitehaven and Workington, was 2,658, so that 91 per cent. of the births were notified.

Health Visiting.

The following table shows the number of visits paid during the year by all Health Visitors:—

	First Visit.	Total Visits.
(1) To Expectant Mothers ...	1452 ...	4359
(2) To Children under 1 year	2631 ...	26053
(3) To Children 1-5 years ...	1350 ...	5110
	5433 ...	35522

Seventy-eight children under five years of age, who were seen at the Maternity and Child Welfare Clinics, were found on examination by the Medical Officers to require treatment.

Particulars of the treatment are set out below:—

Defective Vision.

Number of children concerned	32
Examined by Eye Specialist	25
Spectacles prescribed in	20
Other treatment in	5

Ear, Nose, and Throat Defects.

Number of children concerned	46
Examined by Specialist	29
Tonsils and Adenoids operated on ...	27
Other treatment	2
Treated at the Clinics	17

Report of Work Under the Maternity and Child Welfare Scheme During the Year 1931.

	Ante-natal Examinations by Private Practitioners.	Ante-natal Examinations at Clinics.	Total
Examined at Surgery	165		
Examined at Home	403		
	568	158	726
Findings at Examination—			
Normal	357	94	451
Abnormal	211	64	275
Number of Further Examinations	35	19	54
Post-natal	2	—	2
Recommended for Hospital—			
On account of Home Conditions	11	7	18
On account of Patient's condition	34	15	49
Recommended to have Doctor at Confinement	33	12	45
Specialist's opinion recommended	6	2	8
Extra nourishment recommended and granted	18	23	41

Dental treatment was recommended in 41 cases.

Summary of Abnormalities Found on Ante-Natal Examination.

Anæmia and General Debility	12
Albuminuria and Oedemia	53
Varicose Veins	55
Vaginal Discharge	21
Epilepsy	3
Malpresentation	41
Heart Conditions	8
Dental	17
Tuberculosis	6
Contracted Pelvis	21
Doubtful—Fœtus Dead	2
Hæmorrhage	9
Mental Condition	1
Other Abnormalities—Unsatisfactory General Health	26
	275

Of these cases 67 were admitted to hospital for the following reasons:—

Home Conditions Unsatisfactory	18
Cæsarian Sections	2
Heart Condition and Debility	2
Ante-partum Hæmorrhage	3
Venereal Disease (Doubtful)	2
Marked Albuminuria	10
History of Hæmorrhage	1
Contracted Pelvis	7
Retained Placenta	3
Incomplete Abortion	2
Induce Abortion	1
Threatened Abortion	1
Pyelitis, &c.	1
Mental Instability	1
Pendulous Abdomen, &c.	1
Ovarian Cyst	1
Vaginal Discharge and Varicose Veins	1
Failure of Head to Engage	1
Very High Blood Pressure	1
History of previous difficult Labour ...	3
Partial Prolapse Uterus	1
Tuberculosis	2
Varicose Veins (severe), Malnutrition ...	2
	67

These hospital cases were admitted as under:—

To Whitehaven and West Cumberland Hospital	34
Whitehaven Public Assistance Hospital ...	1
George Street Maternity Hospital, Carlisle	22
Fusehill Hospital, Carlisle	7
Keswick Cottage Hospital	1
Cockermouth Public Assistance Hospital ...	2

Maternal Mortality.

During the year 1931 there were 19 maternal deaths and 3,750 births (including 161 still-births). Therefore, the maternal mortality was at the rate of 5.07 per 1,000 births.

This is the highest it has been during the past three years. (See Graph I.)

In the returns of the Registrar-General maternal

deaths are classified under two headings—(a) Puerperal Sepsis, and (b) Other Puerperal Causes.

During the year there were three deaths from Puerperal Sepsis and 16 from Other Puerperal Causes.

The following graphs (II. and III.) show the death-rates from Puerperal Sepsis and Other Puerperal Causes during the last 10 years, 1922-1931 inclusive.

It will be noted with satisfaction that the rate from Puerperal Sepsis has steadily declined since 1926, and that the death-rate in 1931 from this cause is, with two exceptions, the lowest recorded during the past 10 years.

On the other hand Graph III. shows that the death-rate from Other Puerperal Causes has increased during the last three years, and from this cause it cannot be said to be better than it was ten years ago.

There are several features about the figures showing the year's work that at once attract notice.

These are:—1. The extraordinarily large number (nearly 40 per cent.) of cases in which some abnormality was found on ante-natal examination. This percentage is practically the same whether the patient was examined by a private practitioner or at a clinic.

2. In over 9 per cent. of the cases hospital treatment was deemed to be necessary. In the summary of abnormalities it will be noticed that 53 cases of Albuminuria were found. This condition, however mild, demands immediate and careful attention in order to avoid that, most to be dreaded of all the toxæmias of pregnancy, the condition known as Eclampsia.

Malpresentation of the infant was noted in 41 cases, and in the majority of cases it was possible to rectify the position before labour commenced, thus avoiding much suffering and danger to life of the mother as well as to that of the infant.

In 21 cases there was contraction of the Pelvis to a greater or less extent, in two cases necessitating Cæsarian Section, and in one case Induction of Labour before time.

At first glance it looks as if the Maternity and Child Welfare Scheme had in its first year's working not been a success, had, in fact, been a failure. True it has not succeeded in reducing the maternal mortality, but it has been successful by revealing to us the causes of the high

MATERNAL DEATHS

Urban Districts

Year.	No. of Births. Urban Districts.	Arlecdon and Frizington.		Aspatria.		Cleator Moor.		Cockermouth.		Egremont.		Harrington.		Holme Cultram.		Keswick.		Maryport.		Millom.		Penrith.		Whitehaven.		Wigton.		Workington.		Totals.	
		S.	A.	S.	A.	S.	A.	S.	A.	S.	A.	S.	A.	S.	A.	S.	A.	S.	A.	S.	A.	S.	A.	S.	A.	S.	A.	S.	A.	S.	A.
1920 ..	3521	... —	1	... 1	1	... —	4	... —	—	... 1	1	.. —	—	.. —	—	... —	—	... —	—	... —	—	1 ... 3	—	... 2	3	... 1	—	... 4	5	... 12	16
1921 ...	3159	... —	1	... —	—	... —	1	... —	—	... —	—	... —	1	... —	—	... —	—	... 1	1	... —	3	... —	1	... 1	2	... —	—	... 1	3	... 3	13
1922 ...	2848	... —	—	... —	—	... —	3	... 1	—	... —	1	... —	1	... —	—	... —	—	... 1	1	... —	2	... —	1	... —	—	... —	1	... —	2	... 2	12
1923 ...	2745	... —	1	... —	1	... 2	3	... —	—	... —	—	... —	1	... —	—	... —	—	... —	1	... —	2	... —	2	... —	—	... —	3	... —	2	... 2	16
1924 ...	2614	... —	—	... —	—	... —	1	... 1	—	... 1	—	... —	—	... —	—	... 1	—	... —	4	... —	1	... 1	—	... 1	2	... 1	—	... —	2	... 4	12
1925 ...	2432	... —	—	... —	—	... —	—	... —	1	... —	1	... —	—	... —	—	... —	—	... —	—	... —	3	... —	—	... —	3	... —	—	... —	4	... 1	11
1926 ...	2594	... 1	—	... —	—	... —	2	... 1	—	... —	—	... —	—	... 1	—	... —	—	... —	—	... —	1	... 1	—	... —	3	... —	1	... —	1	... 4	8
1927 ...	2117	... —	—	... —	1	... —	1	... —	1	... 1	—	... —	—	... —	—	... —	—	... —	—	... —	—	... —	—	... —	1	... —	—	... 2	2	... 5	5
1928 ...	2234	... —	—	... —	—	... —	—	... 1	1	... —	1	... —	—	... —	1	... —	—	... —	1	... 1	2	... —	—	... —	1	... —	—	... —	4	... 3	11
1929 ...	2209	... —	—	... —	—	... —	—	... —	—	... —	—	... —	—	... —	—	... —	—	... —	—	... —	1	... —	—	... —	2	... —	—	... —	3	... 1	6
1930 ...	2102	... —	1	.. —	—	... —	—	... —	—	... —	1	... —	—	... —	—	... —	2	... —	1	... —	2	... —	—	... —	1	... —	—	... 1	2	... 2	8
1931 ...	2117	... —	—	... —	—	... 1	—	... —	1	... —	1	... —	—	... —	—	... —	—	... 1	1	... —	2	... —	—	... —	2	... —	—	... —	3	... 1	12

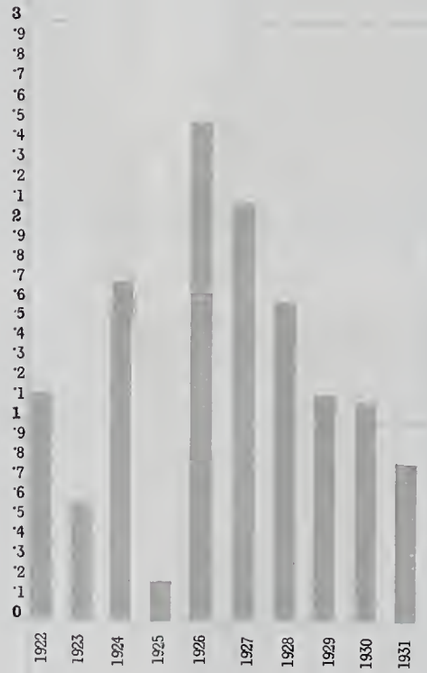
Note.—S = Puerperal Sepsis. A = Accidents of Pregnancy.

I.

Showing the Maternal Mortality from All Causes during the Years 1922 to 1931.

II.

Maternal Mortality from Puerperal Sepsis during the Years 1922 to 1931.



III.

Maternal Mortality from "Other Puerperal Causes" during the Years 1922 to 1931.

maternal mortality, which has been prevalent for so many years, and it has emphasisied the need for an efficient ante-natal scheme, because it has revealed the fact that the vast majority of the causes of that mortality are preventable when treated efficiently, and in time.

I have no doubt whatever that, had there been no such scheme in operation, the mortality would have been considerably higher even than it was.

Who can say, for instance, how many of the 53 cases of Albuminuria would have developed Eclampsia, certainly some would, or how many of the 41 Malpresentations would have ended in complicated labours, demanding operative interference with all the attendant risks of Sepsis.

The figures here submitted have convinced me that the Cumberland County Council is to be congratulated on embarking on and giving its loyal support to a somewhat ambitious scheme, but one from which the mothers in the County will, in the near future, receive the utmost benefit, not only by lessening the risk of death, but also by the prevetion of much suffering and chronic invalidism in later life.

Children Act, 1908.

Under the Local Government Act, 1929, the duties under Part I. of the Children Act, 1908, were transferred to the Midwives and Maternity and Child Welfare Committee in April, 1930.

The County Superintendent and the Health Visitors were appointed Infant Life Protection Visitors, and the following table gives a summary of the work carried out :

SUMMARY OF REPORTS ON VISITATION OF CHILDREN FOR THE YEAR ENDED 31st DECEMBER, 1931.

		Legit.			Illeg.			Total.	
		M.	F.		M.	F.		M.	F.
A.	No. of children under supervision on 1/1/31	5	2	...	21	14	...	26	16
B.	No. brought under supervision during the year ended 31/12/31	5	—	...	5	8	...	10	8
C.	No. removed from Register during the year	6	2	...	6	6	...	12	8
D.	No. remaining under supervision as on 31/12/31 ...	4	—	...	20	16	...	24	16
E.	Total No. of First Visits to Homes by Health Visitors							20	
	Ditto Re-visits							172	
	Total number of children concerned							40	

General Notes.

The Health Visitors found the children well cared for and in good homes. In one or two instances small matters concerning the health of the children were dealt with at the County Council Treatment Centres.

Sanitary Circumstances of the Area.

Water.

In my survey report for 1925 the water supplies of the whole County were exhaustively dealt with.

The only urban areas which now have not an entirely satisfactory supply are:—

Holme Cultram.—The supply to this area remains unchanged, and is as reported in my 1925 report.

Keswick.—So far as quantity is concerned, this area now has a satisfactory supply, and no complaints of shortage or want of pressure have been received, even from the higher parts of the district.

Many complaints, however, of discolouration of the water have been received.

This is a matter which should receive the immediate attention of the Authority.

Maryport.—The Council's decision to instal mechanical filters, the work on which is nearing completion, is certainly a wise one.

Millom.—No change has taken place in this supply which cannot be considered free from risk of contamination.

I understand, however, that the Council is now considering the demolition of the farm house adjacent to the reservoir, which step was recommended by the Ministry of Health in 1924.

Penrith.—The scheme for extending the supply and filtering the water, as outlined in my report for 1925, is now nearing completion.

As regards the Rural Districts, the two noteworthy schemes, which have been completed since my last survey report, are the schemes for the supply of the Carlisle and Wigton Rural Districts.

Very considerable activity has to be noted in the Brampton Rural Area, where many small schemes for villages have been installed.

In Cockermouth Rural District very considerable improvements are recorded in the recent Annual Reports of the Medical Officer of Health (Dr. Mason).

Drainage and Sewerage.

No large schemes of sewering have been undertaken during the past five years. Minor improvements have taken place and many small systems have been installed in some of the rural villages.

Housing.

Under the Housing Act of 1930 any Urban Authority with a population of over 20,000 has to furnish the Minister of Health with a five years' programme, to deal with the housing needs of their area from every aspect, including the clearance of unhealthy areas, and power is given to the Minister to act in default of any Council.

This new Act also throws a duty on County Councils with respect to housing in rural areas, and Rural District Councils have to furnish County Councils with information with regard to the extent to which overcrowding or other unsatisfactory housing conditions exist and the sufficiency of the steps which the Council of the district have taken, or are proposing to take, to remove those conditions and to provide further housing accommodation; in certain circumstances County Councils can give grants to Rural District Councils for the housing of agricultural workers. The Act also provides that the County Council can act in default of Rural District Councils.

In Circular 1138, issued by the Ministry of Health, introducing a Memorandum on the Housing Act, 1930, the following two paragraphs appear, which show concisely what the Government hopes will result from the working of the new Act:—

"It is within the knowledge of local authorities that many of the working classes of this country live in sordid and degrading housing conditions, the continuance of which is nothing less than a social menace. These conditions are due to many causes, poverty, indifference, lack of better accommodation. The new Act is an earnest of the determination of the Government and the legislature to do everything possible to put an end to conditions of this kind. For its successful operation, it demands the full and hearty co-operation of all local agencies, in the

acquisition and spread of knowledge as to bad conditions, and in forming a sound public opinion to assist the Government and Parliament in putting an end to them. In this work the local authorities must themselves take the leading part, and the Minister is confident that they will rise to the full measure of their responsibility.

"The Minister desires to draw the special attention of County Councils and Rural District Councils to the provisions contained in Part IV. of the Act regarding the houses in rural districts. The proper housing of the agricultural workers must form an essential element in any progressive agricultural policy, and in this matter also the responsible local authorities must play their part. The Act provides for the co-operation of the County Councils and Rural District Councils in attacking this serious and important problem, and the Minister trusts that in every county the authorities will, without delay, meet together to formulate plans for dealing comprehensively with the rural needs."

Housing (Rural Workers) Act, 1926,

Up to 31st March, 1932, assistance was given as follows:—

	Grants.	Loans.	Total.
Up to 31st March 1931.			
Amount advanced	£5,535	£50	£5,585
Number of dwellings ...	94	8	102
During the year 1931-32.			
Amount advanced	£2,251	—	£2,251
Number of dwellings ...	30	—	30
Total to 31st March, 1932.			
Amount advanced	£7,786	£50	£7,836
Number of dwellings ...	124	8	132
Total amount of loans sanctioned to 31st March, 1932, by Ministry of Health			£9.750
Loans raised			£7,836
Sanctions in hand			£1,914

Number of dwellings included in Scheme sanctioned by Ministry of Health—Increased from 200 to 400 in February, 1932.

Inspection and Supervision of Food.

The accompanying report of the County Analyst (Mr. Cyril J. H. Stock) deals with action taken under the Sale of Food and Drugs Acts and the Public Health (Milk and Cream) Regulations.

ANNUAL REPORT OF THE COUNTY ANALYST.

1. During the 12 months ending the 31st December, 1931, I have analysed 316 samples of Food and Drugs submitted by the

Inspectors appointed under the Food and Drugs (Adulteration) Act, 1928, for the County of Cumberland, viz.:—

From Whitehaven Division	103
From Carlisle Division	49
From Workington Division	87
From Wigton Division	32
From Penrith Division	45
	316

The number of samples submitted showed a decrease of 3 as compared with the number for the corresponding period ended the 31st December, 1930.

2. The following table indicates the result of the analysis of these samples, together with the action taken in those cases in which samples were found to be other than genuine, and the outcome of such action:—

Samples of Milk submitted for analysis	227
Samples of other articles	89
Total	316
Number adulterated or below standard	33
,, of doubtful quality	0
,, ,, appeal samples	7
,, ,, samples taken on delivery (reference)	2
,, ,, persons cautioned	8
,, ,, ,, summoned	6
,, ,, ,, convicted	1
,, ,, ,, discharged	3
,, ,, ,, to pay costs only	0
,, ,, cases withdrawn	1
,, ,, ,, in which proceedings failed owing to lapse of time	1
,, ,, ,, in which no action taken ...	19
,, ,, ,, pending at end of year	0
Amount of Fines	£2 0 0
Amount of Costs	£2 0 0

For the 12 months ended the 31st December, 1930, 5 persons were summoned, of whom 4 were convicted and 1 was discharged.

3. The percentage of samples adulterated or below standard for the year is 10.74; for the 12 months ended the 31st December, 1930, it was 11.20. In each case all samples reported as not being of genuine quality are included, but appeal and reference are not included.

4. The only article in respect of which proceedings have been instituted is Milk; the whole of the remaining samples were certified as being of genuine quality, although comment has been needed in some cases to which reference is made at a later stage.

5. Of the 227 samples of Milk submitted during the 12 months, 33 were returned as being adulterated or below standard, while 2 samples were taken in course of delivery as reference samples, and 11 samples were taken on appeal to the cow; the remaining 185 samples were found to be genuine.

Excluding reference and appeal samples, the percentage of Milk samples which fell below either one or other of the limits set up in the Sale of Milk Regulations, 1901, is 1720; for the previous 12 months the figure was 14.35, which shows an increase.

Although the number of samples below standard, or adulterated, was 33, 1 of these was reported against on account of the Dirt which it contained, but in other respects it was of satisfactory quality, so that the average figures for Non-fatty Solids and for Fat in samples complying with the requirements of the Sale of Milk Regulations, 1901, are based on 186 samples and are as follows: —

Non-fatty Solids	8.84%
Fat	3.61

The average figures for 185 genuine samples analysed during 1930 were: —

Non-fatty Solids	8.80%
Fat	3.69

Bearing in mind the fact that these samples are taken from all parts of the County, and from cows which are housed and kept under varying conditions, it is remarkable how constant the quality of the genuine samples remains from year to year, and also how satisfactory that quality is.

Of the 2 reference samples taken during the year, 1 was genuine and 1 was deficient in Non-fatty Solids, while of the 7 appeal samples, 3 were genuine, 1 was deficient in Non-fatty Solids and 3 were deficient in Fat.

Only 1 sample of Milk was reported against on grounds other than non-compliance with the requirements of the Sale of Milk Regulations, 1901, and this was a case in which the sample contained Dirt which was largely composed of Dung.

Dirty Milk, to judge by the samples which are received, is fortunately uncommon in the County, and this is the first occasion upon which it has been necessary to draw attention to this form of offence.

6. Samples of articles other than Milk which were submitted during the year numbered 89, all of which were reported as being of genuine quality, although 1 sample of Butter afforded data which required explanation.

On inquiry it was found that the sample in question contained Cream from two newly-calved cows, and a sample taken some days later proving to be of normal quality, it was concluded that the above-mentioned fact accounted for the slight abnormality.

The only article in connection with which adverse comment has been made was a sample described as "Creamy Custard Powder," a sample of which was a genuine Custard Powder, but since it consisted entirely of Maize Farina, tinted and flavoured, could lay no claim to this description, which is likely to be misleading.

These 89 samples comprised 32 different commodities, the nature and number of which are indicated in the accompanying table: —

Almonds, Ground	2	Jam and Marmalade	5
Arrowroot, Ground	1	Lard	2
Baking Powder	3	Margarine	5
Butter	11	Milk, Condensed	2
Cheese	2	Milk, Dried	2
Cinnamon, Ground	1	Mustard Compound	1
Cocoa	6	Oatmeal	1
Coffee	5	Pepper	3
Cornflour	1	Raisins	1
Cream of Tartar	1	Sausage	1
Custard Powder	1	Soda, Bi-Carbonate of	2
Flour	1	Sponge Fingers	1
Flour, Self-raising	1	Sugar	3
Ginger, Ground	1	Sweets	1
Ground Oatmeal	1	Tapioca	6
Infant Food	1	Tea	8

In no case was it necessary to report against these samples under the requirements of the Public Health (Preservatives, etc., in Food) Regulations.

7. Apart from the above observations the work of the past 12 months calls for no further comment.

(Signed) CYRIL J. H. STOCK.

29th December, 1931.

I also submit the very valuable Annual Report of Mr. Simpson, the Chief Veterinary Inspector, for the year 1931.

To the Chairman and Members of the Joint Sub-Milk and Dairies Committee and the Agricultural Committee.

I have the honour to submit for your consideration my fourth annual report on the work done by the Veterinary Department under the Milk and Dairies Acts and Orders, and generally under the Diseases of Animals Acts and Orders.

For this purpose the report has been divided into two sections, one dealing with the Milk and Dairies Acts and Orders, and one with the Diseases of Animals Acts and Orders. The latter section is confined to a brief resumé of the work done under this heading, owing to the fact that full details in regard to this side of the department's activities are given in the reports which are submitted quarterly to the Diseases of Animals Sub-Committee.

ORGANISATION.

The staff of the department is composed of the County Veterinary Officer, with one senior assistant and one junior assistant. There is also a panel of sixteen local veterinary inspectors available for duty in the County in cases of emergency.

During the year the senior assistant resigned on receiving another appointment, and his position was filled by the promotion of the junior assistant, and the vacancy thus created has been filled by the appointment of a new junior assistant.

Section I.
Milk and Dairies Acts and Orders.

No change has occurred during the year in regard to the legislation affecting the County Council's responsibilities in connection with the milk supply.

The number of premises registered in the County for the production of milk and milk products is approximately 3,500. This number is liable to fluctuate from time to time, but the total number of premises registered has not varied materially during the last two years. A considerable proportion of the registered farms are engaged in butter making. Definite information as to the number of premises actually registered has only become available recently, owing to delay experienced in obtaining complete lists of registered premises from the Sanitary Authorities in the County, who are responsible for compiling and keeping up to date these lists.

During the year the practice of enlisting the co-operation of the sanitary authorities in carrying out the work of the Milk and Dairies Order has been continued. Wherever possible, therefore, when routine examinations of registered dairy herds are being carried out, a joint inspection by the veterinary officer and sanitary inspector of the district concerned is arranged. Such an arrangement has a decided advantage, and tends to maintain the interest of the sanitary authorities in the general administration of the Order, and also engenders a spirit of co-operation which is undoubtedly the best means of administering the Order, especially when specific duties are imposed in the Order, on both the County Council and the Sanitary Authorities. It is hoped that these joint visits in general will have the effect of inducing the farmer to take more interest and pride in the production of milk than was formerly the case.

Unfortunately, existing conditions prevent these visits being as frequent as we all desire, but, nevertheless, as indicated on page 5 of this report, certain material progress has been made in improving the general standard of milk production in the County.

Comment was made in my last report with regard to the progress of reconstruction of cowsheds and dairy premises to meet the requirements of the Milk and Dairies Order. In some districts progress is still slow. Economic conditions have made it difficult for this work to be proceeded with, and thus it seems all the more necessary that the closest attention must be paid to methods until reconstruction of buildings on a larger scale becomes possible.

Inspection of Dairy Herds.

The routine inspection of dairy herds in the County has been considerably hampered owing to the prolonged illness of the senior veterinary assistant, practically four months' work being lost during the year. The occurrence of Foot-and-Mouth Disease in the County also interfered with the work. These two factors have both resulted in seriously curtailing the number of routine inspections, and bringing the number of such inspections to a lower figure than it was anticipated would be reached during the year. The number of these inspections and the results obtained are shown on the tables given at the end of this section of the report.

The veterinary examinations are made primarily with the purpose of detecting disease liable to affect the milk supply. The udder of each cow is carefully examined and samples of milk are taken from any cow or heifer showing suspicious signs of tubercle. Similarly, attention is paid to the discovery of animals which may be suffering from a chronic cough or otherwise showing clinical signs of tuberculosis. Samples of sputum are collected if available and examined for tubercle bacilli. Other udder abnormalities are also noted, and the use of milk from cows suffering from udder disease of any type liable to affect the milk consumer is prohibited. Opportunity is also taken to educate milk producers regarding the signs and symptoms of tuberculosis, with the object of encouraging early reporting of suspected cases under the Tuberculosis Order. When herds are liable to examination unexpectedly it discourages any temptation to retain diseased animals in the herds. The educational side of the work is again emphasised. Its full value cannot be judged solely by the number of actual diseased animals dealt with.

The bulk of the routine examinations were carried out during the months of the year when the cows were in the shippons, but during this year examinations were continued during the grazing period, notices being sent to the farmers to have their stock available for examination at a specified time. This method of working during the grazing period appears to have answered satisfactorily, and has given rise to no unnecessary inconvenience.

Milk and Dairies (Consolidation) Act, 1915.

Section 4 of this Act requires that notice shall be given to the County Medical Officer of Health if milk produced in the County area is found to contain tubercle by the Medical Officer of Health of another authority, either inside or outside the administrative area.

Three complaints of this nature have been investigated during the year as compared with three in the previous year. The complaints originated from the following sources:—

Authority.	No. of Complaints.
Newcastle	1
Carlisle	1
Bradford	1

In addition, seven cases have been detected as the result of Police samples taken in the following districts. This is an increase of four compared to last year.

District.	No. of Cases.
Aspatria	1
Cockermouth	1
Keswick	1
Longtown	1
Penrith	1
Workington	1
Whitehaven	1

The usual procedure followed in these cases is:—(1) A careful clinical examination of the herd or herds involved is made and individual samples of milk are taken from suspected cows, such samples being examined microscopically for the presence of tubercle bacilli, or biologically if necessary, i.e., the injection of the sediment of the sample into guinea pigs; (2) Where this procedure fails, group samples are taken and these are examined by

biological methods. If any group sample is found to be positive the cows in that particular group are sampled individually; (3) If by the procedure indicated in 1 or 2 the offending cow is detected, it is valued and slaughtered under the Tuberculosis Order; (4) Thereafter, a bulk sample from the whole herd is taken to ascertain if the infection has been completely removed.

The investigation in the above cases led to the source of infection being detected at the first examination in seven out of ten cases by a microscopical examination of the milk from suspected cows found on clinical examination. In one case grouping of the cows and biological examination of the milk was necessary. As a consequence of this work nine cows giving tuberculous milk and one cow excreting tuberculous sputum were slaughtered. In regard to the Penrith case the producer's premises were in Westmorland, and the case was referred to the Medical Officer of Health for that County for investigation.

The case notified from Bradford did not admit of the usual investigation being carried out. The sample was taken from the milk supplied by a collecting depôt in the County, which draws its supplies from a large number of farms in the County and in adjoining districts. The sample was taken from a consignment of 391 gallons, which was part of the day's supply at this depôt of 15,000 gallons, drawn from over 800 farms. It seemed impossible in these circumstances to carry out the usual investigation. The case, however, is interesting from the point of view of showing the extent to which tuberculous infection may be distributed through large quantities of milk, and yet be capable of detection by a biological examination. A further interesting feature arises in connection with this sample owing to the fact that the milk was pasteurised before it was sampled and yet living tubercle infection was found in the milk. A second instance of this nature has come under notice recently, and will fall to be dealt with in my next report. These instances raise the very important question as to the value of pasteurisation. The advocates of pasteurisation regard the process as being not only of value from a commercial standpoint, but also as having an important public health value, in the sense that pasteurised milk can be regarded as *absolutely safe* from the point of tubercle infection. Such a contention is open to serious doubt in view of the above experience. No doubt, apart from tubercle infection, pasteurisation has a definite value in controlling epidemics of milk borne disease, especially during the summer, provided the process is carried out efficiently. On the other hand, from the purely commercial standpoint, it must be admitted that the process has a definite value in that it allows for the transporation of milk over long distances, so that it reaches the consumer in a condition fit for use, but its value in this direction does not in any way appear to minimise the necessity for insistence on the production of clean milk from healthy cows. In other words pasteurisation is not a substitute for clean milk production, and it is just as important for the consumer of pasteurised milk to be assured as to the source of production, as it is for the consumer of raw milk.

It is unfortunate that no reliable evidence is available as to the nutritive value of pasteurised milk compared to raw milk, and until a properly controlled experiment on a sufficiently wide scale has been carried out this point must remain open. It is significant, however, that many authorities do consider at the

present moment that the nutritive value of milk is lowered by heating, and that this must be compensated for by the addition of other substances to replace what is said to be lost in the process of heating.

Routine Sampling of Milk.

The Milk and Dairies Sub-Committee gave authority for an increased number of samples to be taken during the year. The number taken in 1930 was 150. This has been increased to 381 during the year under review, 356 being taken by the Police, and 25 by Sanitary Authorities. It will be borne in mind that authority was given to me to allot a certain number of surplus samples to those Sanitary Authorities which had already made arrangements to take samples in their own districts, supplementary to those taken by the Police. Surplus samples have been allotted as follows:—

Cockermouth R.D.C.	12
Brampton	10
Penrith	3

The routine sampling has as hitherto been concentrated on the supplies actually consumed in the administrative area. The onus of taking samples of milk actually consumed outside the area would appear to rest on the Health Authority concerned, the County Council only being concerned in regard to the investigation of any specific complaints made under Section 4 of the Milk and Dairies (Consolidation) Act.

The bacteriological examinations of the samples collected has been carried out at the Cumberland Pathological Laboratory, Carlisle, and acknowledgment is made of the extremely satisfactory service given by the Laboratory in connection with the collection of the samples on arrival at Carlisle, and their subsequent examination.

The results of the sampling are given below, according to the Sanitary Area in which the producers premises are situated.

Rural Areas.	Satisfactory.	Tubercular.	Contaminated (non T.B.)	Total.
Alston	9	—	—	9
Bootle	10	—	6	16
Brampton	21	—	4	25
Carlisle	10	—	7	17
Cockermouth	60	3	32	95
Longtown	14	1	3	18
Penrith	23	—	3	26
Whitehaven	21	1	8	30
Wigton	16	—	2	18
Urban Areas.				
Arlecdon & Frizington	13	—	9	22
Aspatria	1	—	1	2
Cockermouth	2	—	—	2
Cleator Moor	8	—	5	13
Egremont	8	—	3	11
Holme Cultram	5	—	2	7
Keswick	4	1	3	8
Millom	8	—	1	9
Harrington	7	—	5	12
Maryport	6	—	1	7
Penrith	7	1	7	15
Wigton	6	—	1	7

Boroughs.	Satisfactory.	Tubercular.	Contaminated (non T.B.)	Total.
Workington	7 ...	— ...	1 ...	8
Whitehaven	3 ...	— ..	1 ...	4
	269 (70.6%)	7 (1.8%)	105 (27.6%)	381
1930	(57%)	(2%)	(41%)	
1929	(33%)	(1.5%)	(65.5%)	

The number of samples taken in the Boroughs of Workington and Whitehaven refers only to samples taken from producers premises situated in the Boroughs, and in addition, 25 samples of milk retailed in Workington and 16 samples of milk retailed in Whitehaven, were taken during the year, the results being included under the respective areas in which the producers farms are situated.

The above figures show that a very gratifying improvement has taken place during the last three years in the milk consumed in the County Area. In judging the cleanliness of the milk the same standard has been maintained during the year. This satandard is that laid down for Grade A. milk by the Ministry of Health in the Special Designations Order of 1923, viz., a limit of 200,000 bacteria per c.c., and coliform bacilli absent in dilutions of 1/100 of a c.c. Any samples below this standard have been classified as unsatisfactory, except in a few cases where delay in transit has occurred, and there has consequently been deterioration in the sample for which the producer could not fairly be held responsible. In every case where unsatisfactory results are obtained, a visit is made to the producers premises by one of the veterinary staff, and if it can be arranged a joint inspection is made with the local sanitary inspector. In some cases the result of the sampling, if unsatisfactory, is communicated direct to the sanitary authority concerned, with a request for the necessary investigation to be made. The number of visits made by the staff in this connection is 113.

Work done in following up these unsatisfactory milk supplies again emphasises the importance of methods, and that it is possible to produce clean milk even in premises which do not reach a high standard from a structural point of view. It is largely the personal element which counts in clean milk production. It is not, however, suggested that any relaxation of efforts should be permitted by Sanitary Authorities in obtaining improvements and reconstruction of cowsheds necessary to reach the moderate standard required by the Milk and Dairies Order. If cows are to be maintained healthy, and if the spread of tubercle in our dairy herds is to be checked, then sufficient air-space, ventilation, and sunlight are essential.

It is satisfactory to note that the milk sampling undertaken by the County Council has been supplemented by additional work undertaken directly by the following Sanitary Authorities, to whom I am indebted for supplying information as to the results obtained, which are detailed below:—

Rural Areas.	Satisfactory.	Tubercular.	Contaminated (non T.B.)	Total.
Brampton R.D.C.	10 ...	— ...	— ...	10
Whitehaven R.D.C. ...	25 ...	— ...	9 ...	34
Urban Areas.				
Cockermouth U.D.C. ...	4 ...	1 * ...	1 ...	6

Boroughs.	Satisfactory.	Tubercular.	Contaminated (non T.B.)	Total.
Whitehaven	8 ...	— ...	22 ...	30
Workington	4 ...	— ...	8 ...	12

* NOTE.—The investigation in this case has not been completed.

I regret, however, to have to report again that no arrangements for the bacteriological examination of milk samples have yet been made by the Sanitary Authorities of any other districts except those mentioned above. Reference was made in my last Annual Report to the desirability of all Sanitary Authorities co-operating in this work. These Authorities have concurrent powers with the County Council to take samples for bacteriological examination, and if further use of these powers were made the detection of unsatisfactory milk supplies would be materially facilitated, and more general improvement made possible.

Milk (Special Designations) Order, 1923.

This Order has remained unchanged. The nomenclature still gives rise to frequent comment on account of its ambiguity, and the difficulty of the general public to appreciate what the various designations actually mean. The three classes of raw milk designations under the Order are as follows:—

(1) Certified. (2) Grade A. (T.T.) (3) Grade A.

The first two groups are from cows which have passed the Tuberculin Test. The third grade is from cows which are not tested with Tuberculin, but which are regularly submitted every three months to a careful clinical examination. In each case there is a fixed bacterial standard. Licences for the first two grades are issued by the Ministry of Health, which is responsible for the control of the herds. Licences for Grade A. milk, however, are issued by the County Council.

The number of these licences in force at the end of the year in the County Area are:—

Certified, 3. Grade A. (T.T.), 7. Grade A., 3.

The herds on the farms holding Grade A. licences have been regularly examined as required by the Order, and the general methods of production kept under close scrutiny. Samples of milk have also been taken from time to time in order to ensure that the prescribed bacterial standard was being maintained. On one of the farms holding a Grade A. licence, conditions have not been maintained at a satisfactory standard, and a warning has been issued that the licence will be withdrawn unless improved conditions are maintained.

A sample of milk from one of the Grade A. herds was found to contain tubercle bacilli. The offending cow was found immediately and removed from the herd and subsequently slaughtered under the Tuberculosis Order. A control sample taken later showed that all infection had been removed from the herd.

Provision of Milk for School Children.

During the year special attention has been paid to the examination of dairy herds and premises belonging to farms which are supplying milk to certain schools in the County Area, under the supervision of the Health Department. Frequent samples have been taken to ensure that the milk supplied was of a satisfactory quality.

Whenever possible the Health Department has been recommended to make use of any available supplies of Grade A. (T.T.) milk in particular, and also Grade A. milk.

TABLE I.

Statement showing the number of Herds inspected, and the number of Cows examined during the year, 1931:—

	1931.	1930.
Herds Inspected	1700 ...	1054
Cows Examined	20367 ...	16784

TABLE II.

Statement showing the number of Cows found to have abnormal conditions of the Udder:—

Tuberculosis of the Udder	23
Suspected Tuberculosis (found to be negative) ...	17
Atrophy	380
Mammitis	97
Induration (non-tubercular)	26
Suppuration	5

In addition, four cows were found to be suffering from Tuberculous Emaciation, and sixteen cows were detected showing Clinical Signs of Tuberculosis accompanied by a Chronic Cough.

TABLE III.

Statement showing the number of Samples taken by Veterinary Inspectors under the Tuberculosis Order and Milk and Dairies Order (exclusive of Police Samples), and the results of the examinations:—

Milk.

Number of Samples taken	211
Number found to contain tubercle bacilli	38
Number found to contain other infectious organisms	11
Number negative	162

Sputum.

Number of Samples taken	145
Number found to contain tubercle bacilli	60
Number negative	85

SECTION 2.

DISEASES OF ANIMALS ACTS AND ORDERS.

The following are the Diseases scheduled by the Ministry of Agriculture and Fisheries:—

Anthrax.
Foot-and-Mouth Disease.
Parasitic Mange.
Sheep Scab.
Swine Fever.
Tuberculosis, and for some purposes
Contagious Abortion in Cattle.

The following diseases are also scheduled, but have been eradicated in Great Britain on the dates specified:—Sheep Pox (1850), Cattle Plague (1877), Epizootic Lymphangitis (1906), Rabies (1922), and Glanders and Farcy (1928).

The Local Authority is also responsible for the administration of a number of additional Orders regulating the transit and

importation of animals. Additional duties are also imposed in connection with the inspection of stock at markets, and cleansing and disinfection of sale-yards.

Tuberculosis.

The administration of the Tuberculosis Order of 1925 continues to occupy a considerable amount of the time of the veterinary staff. Besides providing for the reporting of suspected cases by owners and veterinary surgeons, the Order is worked by the veterinary staff in conjunction with Part 4 of the Milk and Dairies Order, and with the Milk and Dairies (Consolidation) Act, 1915. In the latter connection it provides for the slaughter of cows found to be affected with tuberculous disease likely to affect the milk supply.

The Order was amended during the year, the minimum compensation provided under the Order being reduced from 45/- to 30/-.

The following statement shows the number of Cattle dealt with under the Order during the year:—

	1931.	1930.
Premises on which "disease" was reported or suspected	245	217
Premises on which "disease" was found to exist	176	133
Premises on which "disease" was found not to exist	69	84
Total number of Cattle on premises visited	8255	6649
Number of Cattle clinically examined	3611	4147
Number of Cattle slaughtered by Local Authority:—		
Cows in milk	128	106
Other cows or heifers	51	31
Other bovines	4	2
	183	139
Types of Tuberculosis found amongst the Cattle slaughtered:—		
Tuberculosis of the Udder	47	43
Giving Tuberculous Milk but not showing clinical evidence of Tuberculosis during life	—	3
Tuberculous Emaciation	62	51
Tuberculous with Chronic Cough, etc.	73	52
Not affected with Tuberculosis	1	—
	183	139

Statement Showing Distribution of Cases Investigated.

Police Division.	No. of Reports	No. of animals slaughtered.	No. negative.
Carlisle	94	70	24
Penrith	32	22	10
Wigton	44	32	12
Workington	42	33	9
Whitehaven	41	26	15
	253	183	70

Foot-and-Mouth Disease.

	1931.	1930.
No. of Cases reported	6	Nil
No. of Cases confirmed	3	Nil
No. of Cases negative	3	Nil

The three outbreaks in 1931 occurred amongst imported Irish animals. The County was subject to restrictions in connection with these outbreaks from 17th June until 30th July.

Anthrax.

	1931.	1930.
No. of Cases reported	87	72
No. of Cases confirmed	7	3

The following statement shows the Police Division from which the cases were reported and the results of the investigations: —

Division.	No. of Reports.		Negative.		1931.	1930.	1931.	1930.
	1931.	1930.	1931.	1930.	Confirmed.		Animals Affected.	
Carlisle ...	29	18	27	18	2	—	2	—
Penrith ...	15	8	12	8	3	—	3	—
Wigton ...	27	31	25	28	2	3	2	3
Whitehaven	7	6	7	6	—	—	—	—
Workington	9	9	9	9	—	—	—	—
	—	—	—	—	—	—	—	—
	87	72	80	69	7	3	7	3
	—	—	—	—	—	—	—	—

Sheep Scab.

	1931.	1930.
No. of Cases reported	24	33
No. of Cases confirmed	13	16
No. of confirmed Cases reported by owners	5	10
No. of confirmed Cases detected by Veterinary Staff	8	6
No. of Cases due to sources ontside the County (exclusive of Scotland)	4	4
No. of Cases due to sources within the County	9	12

The outstanding feature in regard to this disease is the progressive decline in the number of outbreaks attributable to Scotch sheep. Whereas in the period 1921-24, the percentage of outbreaks in the County attributable to Scotch sheep was 79 per cent., it has declined in the period 1928-31 to nil.

The outbreaks during the year attributable to sources within the County have been largely localised in two areas, namely, the Pennines and the Buttermere Valley.

Including the routine examination of the sheep on the Pennines which were carried out in August and October, and also the other examinations necessitated in examining sheep belonging to infected and in-contact stocks, approximately 23,000 sheep have been submitted to a veterinary examination in the County during the year.

Swine Fever.

	1931.	1930.
No. of Cases reported	24	39
No. of Cases confirmed	Nil	Nil

The control of this disease is retained by the Ministry of Agriculture.

Contagious Abortion.

A certain amount of control of this disease is provided for in the Epizootic Abortion Order of 1922. It is an offence under this Order to expose for sale a cow or heifer in any mart or sale-yard which has calved prematurely within the previous two months. It is also an offence to sell such an animal, unless the seller shall have given notice to the purchaser in writing, that the animal calved prematurely.

It is also unlawful to turn out such cows or heifers on common or unfenced land, or to graze them on the highway.

No cases of infringement of this Order have come under notice during the year, although it is feared the Order is commonly infringed. Offences, however, are difficult to prove. The disease is very prevalent in the County, and is responsible for considerable losses to breeders and milk producers.

The casual organisms are known to be secreted in the milk of affected cows, and cases of intermittent fever or "Undulant Fever" in man have been shown to be attributable to infected milk. Fortunately, in this country, cases of human infection appear to be exceedingly rare.

Markets.

There are 18 market centres in the County, but at five of these centres the sales held are only of a seasonal nature.

Over 100 visits have been paid by the Veterinary Staff to these markets during the year for the purpose of inspecting the stock exposed for sale, and also for the purpose of inspecting the general cleansing and disinfection of the sale-yards.

The conveyance of livestock to and from the markets in the County is largely carried out now by motor vehicles, and both the Police and the Veterinary Stag give continual attention to the cleansing and disinfection of these vehicles. Most of the larger market centres have now provided facilities in the immediate vicinity of the mart for cleansing and disinfecting these transport vehicles.

Importation of Animals.

The following is a statement showing the approximate number of cattle and sheep imported into the County under the Animals (Landing from Ireland, Channel Islands, and the Isle of Man) Order of 1923.

	Cattle.	Sheep.
1931 ...	14399 ...	1792
1930 ...	17692 ...	4755

There is one authorised Irish cattle mart in the County, viz., Cockermouth. Lairage accommodation for the temporary detention of animals for sale at this mart has been licensed as required.

Miscellaneous Duties.

During the year the County Veterinary Officer co-operated with the Agricultural Organiser and his staff in arranging demonstrations in the County in connection with the eradication of warble fly.

Since 1928 the herd at Newton Rigg has been tested with Tuberculin twice annually, with the object of maintaining it in a tubercle free state. The usual six monthly tests were carried out during the year.

The County Council is the local authority under the Rats and Mice (Destruction) Act, 1919, and certain duties in connection with this Act have been undertaken by the Veterinary Staff during the year.

In conclusion, I should like to express my indebtedness to the Chief Constable and to the members of the County Constabulary for the efficient co-operation and assistance which has been extended to me during the year in connection with the administration of the Acts and Orders detailed in the Report.

I am, Ladies and Gentlemen,

Your obedient servant,

R. Simpson,
County Veterinary Officer.

Whitehall Chambers,
Lowther Street, Carlisle.

Prevalence of, and Control over, Infectious Diseases.

Smallpox.

Only one case of Smallpox has been notified during the last five years. This was promptly dealt with by isolation in the Smallpox Hospital and there was no further spread.

Scarlet Fever.

During the year 200 cases were notified (133 in Urban and 67 in Rural Districts) compared with 186 the previous year.

One death (in the Penrith Urban District) was registered.

In	1926	there	were	603	cases	with	4 deaths
,,	1927	,,	,,	336	,,	,,	3 ,,
,,	1928	,,	,,	185	,,	,,	1 death
,,	1929	,,	,,	121	,,	,,	0 deaths
,,	1930	,,	,,	186	,,	,,	1 death

Diphtheria.

During the year 93 cases were notified (45 in Urban and 48 in Rural Districts) compared with 146 cases in the previous year.

From this disease there were five deaths (three in Urban and two in Rural Districts) compared with 14 deaths the previous year.

So far as I am aware, no Schick immunisation has been carried out in any area during the year.

				Case Mortality.
In 1926 there were	277	cases and	21 deaths	7%
,, 1927 ,, ,,	220	,, ,,	11 ,,	5%
,, 1928 ,, ,,	179	,, ,,	11 ,,	6%
,, 1929 ,, ,,	95	,, ,,	6 ,,	6%
,, 1930 ,, ,,	146	,, ,,	14 ,,	9%

Enteric Fever.

Nine (9) cases were notified during the year, compared with 14 the year before.

Two deaths were registered from this disease.

In 1926 there were	10	cases and	0 deaths
,, 1927 ,, ,,	7	,, ,,	0 ,,
,, 1928 ,, ,,	12	,, ,,	2 ,,
,, 1929 ,, ,,	10	,, ,,	3 ,,
,, 1930 ,, ,,	14	,, ,,	5 ,,

Puerperal Fever and Puerperal Pyrexia.

During the year 4 cases of Puerperal Fever were notified, 1 in Cleator Moor and 3 in Workington. Three deaths were registered, 1 in Cleator Moor, 1 in the Carlisle Rural District, and 1 in Longtown Rural District.

The deaths from Puerperal Fever in the Rural Districts do not appear to have been notified.

Of Puerperal Pyrexia 35 cases were notified, 19 in Urban and 16 in Rural Districts. In two of these cases nursing was provided by the Authority, and two cases were admitted to hospital, whilst six cases were seen by a Consultant.

In 1926 there were	13	cases notified with	11	deaths	
,, 1927 ,, ,,	6	,, ,,	,,	7	,,
,, 1928 ,, ,,	5	,, ,,	,,	6	,,
,, 1929 ,, ,,	10	,, ,,	,,	3	,,
,, 1930 ,, ,,	6	,, ,,	,,	3	,,

Measles.

In 1926 there were	33	deaths	
,, 1927 ,, ,,	24	,,	
,, 1928 ,, ,,	0	,,	
,, 1929 ,, ,,	9	,,	
,, 1930 ,, ,,	7	,,	
,, 1931 ,, ,,	20	,,	

Whooping Cough.

In 1926	there	were	28	deaths
,, 1927	,,	,,	30	,,
,, 1928	,,	,,	22	,,
,, 1929	,,	,,	29	,,
,, 1930	,,	,,	14	,,
,, 1931	,,	,,	19	,,

Diarrhœa.

In 1926	there	were	30	deaths	in	children	under	2
,, 1927	,,	,,	25	,,	,,	,,	,,	,,
,, 1928	,,	,,	18	,,	,,	,,	,,	,,
,, 1929	,,	,,	29	,,	,,	,,	,,	,,
,, 1930	,,	,,	29	,,	,,	,,	,,	,,
,, 1931	,,	,,	15	,,	,,	,,	,,	,,

Ophthalmia Neonatorum.

Cases of Ophthalmia Neonatorum notified in 1931 :—

Notified	21
Treated :—	
At Home	17
In Hospital	4
Vision Unimpaired	0
Vision Impaired	0
Total Blindness	0
Deaths	0

Public Health (Smallpox Prevention) Regulations 1917.

No vaccinations or re-vaccinations have been performed under these Regulations.

Vaccination.

When the Local Government Act, 1929, came into force and it became the duty of the County Council to administer the Vaccination Acts, one Vaccination Officer was appointed for the whole of the Administrative County.

A glance at the returns submitted by the Vaccination Officer will make it clear that this step was amply justified.

There are now 18 Public Vaccinators in the County. During the year ended September, 1931, there were 1,446 successful vaccinations recorded, and of this figure 1,126 (or 77.9 per cent.) were carried out by the Public Vaccinators, the County Council paying £438 17s. 11d. for this service.

RETURN RESPECTING THE VACCINATION OF CHILDREN WHOSE BIRTHS WERE REGISTERED DURING THE YEAR 1930.

Vaccination District.	No. of Births Registered.	Certificates of Vaccination received. No	Certificates of Vaccination received. Percent. of Reg. Births.	Statutory Declarations received. No.	Statutory Declarations received. Percent. of Reg. Births.	Otherwise accounted for. No.	Otherwise accounted for. Percent. of Reg. Births.	Cases Unaccounted for. No.	Cases Unaccounted for. Percent. of Reg. Births.
Abbey Holme	137	73	53.3	58	42.3	6	4.4	—	—
Alston	30	6	20.0	21	70.0	3	10.0	—	—
Bootle	202	118	58.4	71	35.2	12	5.9	1	0.5
Brampton	89	72	80.9	11	12.4	6	6.7	—	—
Burgh	18	13	72.2	4	22.2	1	5.6	—	—
Cockermouth	161	41	25.5	117	72.7	3	1.8	—	—
Dalston	48	40	83.3	7	14.6	1	2.1	—	—
Egremont	295	128	43.4	153	51.9	13	4.4	1	0.3
Harrington	253	103	40.7	140	55.3	10	4.0	—	—
Hayton	29	27	93.1	2	6.9	—	—	—	—
Keswick	82	42	51.2	36	43.9	4	4.9	—	—
Kirkoswald	96	78	81.3	17	17.7	1	1.0	—	—
Longtown	94	87	92.6	5	5.3	2	2.1	—	—
Maryport	351	83	23.6	252	71.8	16	4.6	—	—
Penrith	254	155	61.0	86	33.9	12	4.7	1	0.4
Stanwix	40	35	87.5	4	10.0	1	2.5	—	—
Wetheral	51	42	82.3	8	15.7	1	2.0	—	—
Whitehaven	552	211	38.2	286	51.8	50	9.1	5	0.9
Wigton	264	114	43.2	129	48.9	19	7.2	2	0.7
Workington	549	83	15.1	440	80.2	26	4.7	—	—
Totals—1930	3595	1551	43.1	1847	51.4	187	5.2	10	0.3
Totals—1929	3684	1420	38.6	1692	45.9	229	6.2	343	9.3

"Cases otherwise accounted for" includes cases died unvaccinated, cases postponed by medical certificate, cases insusceptible of vaccination, cases removed from the district, and cases lost sight of.

W. BUTCHER,
Vaccination Officer for Cumberland.

From this return it will be noticed that more than half the children are unvaccinated, having obtained exemptiom by Statutory Declaration.

It will also be noticed that, whilst in 1929 9.3 per cent. of the cases were unaccounted for, in 1930 this figure had dropped to 0.3 per cent.

The work of Vaccination Officer has been very efficiently done by Mr. Butcher, and the results amply justify the decision to have only one Vaccination Officer for the whole County.

Tuberculosis.

Particulars of new cases of Tuberculosis and of all deaths from the disease in the area during 1931 are here given :—

Age. Periods.	New Cases. Pulmonary.		New Cases. Non-Pulmonary.		Deaths. Pulmonary.		Deaths. Non-Pulmonary.	
	M.	F.	M.	F.	M.	F.	M.	F.
0 ...	1	—	2	2	—	—	1	3
1 ...	2	1	4	4	—	—	3	1
5 ...	5	6	10	14	3	1	—	3
10 ...	10	7	6	17	1	5	1	4
15 ...	15	19	4	6	9	15	1	1
20 ...	13	18	5	5	10	12	1	1
25 ...	28	33	4	5	21	17	—	4
35 ...	16	25	2	1	18	8	2	—
45 ...	17	7	1	—	18	3	—	—
55 ...	6	7	—	1	7	7	—	3
65 & upwards	6	4	—	1	5	3	—	1
Totals	119	127	38	56	92	71	9	21

Arranged in the order of their death-rates from Pulmonary Tuberculosis, the Urban and Rural Districts stand thus :—

Urban.		*Rural.*	
Egremont	1.8 (0.3)	Alston	1.1 (1.1)
Arlecdon and Frizington ..	1.6 (1.4)	Carlisle	0.8 (0.6)
Cleator Moor ...	1.6 (0.2)	Whitehaven ...	0.6 (0.3)
Whitehaven ...	1.4 (1.0)	Longtown	0.5 (0.8)
Workington ...	1.2 (0.6)	Cockermouth ..	0.4 (0.4)
Cockermouth ..	1.0 (0.2)	Wigton	0.4 (0.3)
Wigton	0.8 (0.2)	Bootle	0.3 (1.0)
Maryport	0.7 (0.8)	Penrith	0.2 (0.4)
Millom	0.5 (0.8)	Brampton	0.1 (0.9)
Harrington ...	0.4 (0.4)		
Keswick	0.4 (1.7)		
Aspatria	0.3 (1.1)		
Penrith	0.3 (0.3)		
Holme Cultram	Nil (Nil)		

The death-rate from Pulmonary Tuberculosis in 1931 throughout the County was 0.7 per 1,000 of the population, slightly higher (0.1 per 1,000) than in the previous two years.

From the nature of Pulmonary Tuberculosis, it is to be expected that the incidence rate and the death-rate in any given area would vary from year to year within fairly larger limits, and that the rates would be higher in Urban than in Rural areas.

This is so in this County, and the marked variations in death-rates will be noted in the tables given in the reports from year to year. For instance, a glance at the table given above will show that, whilst the death-rate in Egremont in 1930 was only 0.3 per 1,000 of population, in 1931 it was 1.8 per 1,000; in Cleator Moor in 1930 the death-rate was 0.2, whilst in 1931 it was 1.6; again in Keswick in 1930 it was 1.7, whilst in 1931 it was 0.4.

But a scrutiny of the tables for 10 years back shows that there are a few areas in which, with an exceptional year now and then, the death-rate from Tuberculosis is consistently high, and it is these areas which keep the average death-rate of the County at its present fairly high level.

These areas are Arlecdon and Frizington, Egremont, Millom, Whitehaven, and Workington, and to a less extent Maryport.

The one common factor in all these areas is undoubtedly the lowering of vitality, due to prolonged under feeding, the inevitable consequence of depression in trade, which not only makes individuals more susceptible to infection, but also makes them less able to resist infection once they have acquired it.

No one realises more than I do the deplorable conditions under which many of these unfortunate patients have to live, and the hardships they have to put up with, but in spite of this I still maintain that they do not take their part in prevention.

An essential part of Sanatorium treatment is education in preventive measures. In a Sanatorium every patient is taught how to live an open-air life for his own benefit, as well as what precautions are necessary to prevent infection being passed on to others.

In the vast majority of cases on return from the Sanatorium the patient refuses to sleep with open windows.

sits in a stuffy atmosphere most of the day, coughs, but takes no precautions—such as holding a handkerchief or a piece of paper in front of the mouth—to prevent "droplet" infection, and instead of expectorating into a flask, specially provided for the purpose, will spit about anywhere most convenient, and so will convey infection.

Can it be wondered at then that the efforts of the County Council have not met with the success which they deserve, and that infection is conveyed wholesale in a population consisting largely of children and adolescents, who have been consistently under-fed?

Arranged in the order of their death-rates, from all forms of Tuberculosis (including Pulmonary) the Urban and Rural Districts stand thus:—

Urban.			*Rural.*		
Egremont	1.9	(0.3)	Alston	1.1	(1.1)
Arlecdon and Frizington	1.8	(1.7)	Longtown	1.0	(0.8)
Cleator Moor	1.8	(0.5)	Carlisle	0.9	(0.7)
Whitehaven	1.7	(1.2)	Whitehaven	0.6	(0.4)
Workington	1.7	(0.9)	Bootle	0.5	(1.0)
Keswick	1.1	(1.7)	Cockermouth	0.4	(0.5)
Cockermouth	1.0	(0.4)	Wigton	0.4	(0.4)
Millom	0.8	(0.9)	Brampton	0.3	(0.9)
Wigton	0.8	(0.2)	Penrith	0.3	(0.7)
Harrington	0.7	(0.9)			
Maryport	0.7	(1.2)			
Aspatria	0.3	(1.7)			
Penrith	0.3	(0.6)			
Holme Cultram	0.2	(0.2)			

Notifications of Pulmonary Tuberculosis.

In 1926 there were 250 notifications.
,, 1927 ,, ,, 220 ,,
,, 1928 ,, ,, 200 ,,
,, 1929 ,, ,, 235 ,,
,, 1930 ,, ,, 213 ,,
,, 1931 ,, ,, 254 ,,

No action has been taken, under the Public Health (Prevention of Tuberculosis) Regulations, 1925.

Public Health Act, 1925.

No action has been taken under Section 62 for the compulsory removal to hospital of any one suffering from Tuberculosis.

Form T. 145.

TUBERCULOSIS SCHEME OF THE CUMBERLAND COUNTY COUNCIL

Return for the Year 1931.

(A) Return showing the work of the Dispensary (or Dispensaries).

DIAGNOSIS	PULMONARY				NON-PULMONARY.				TOTAL.			
	Adults.		Children.		Adults.		Children.		Adults.		Children.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
A.—New Cases examined during the year (excluding contacts):—												
(*a*) Definitely tuberculous	55	63	11	8	5	5	11	18	60	68	22	26
*(*b*) Diagnosis not completed	...	...	...	...	...	...	...	...	6	4	4	2
(*c*) Non-tuberculous .	...	...	...	...	...	...	...	...	34	33	25	13
B.—Contacts examined during the year:—												
(*a*) Definitely tuberculous	3	4	1	2	...	...	1	...	3	4	2	2
*(*b*) Diagnosis not completed	...	...	...	...	...	...	...	...	...	...	...	...
(*c*) Non-tuberculous ..	...	...	...	...	...	..	...	...	16	32	299	268
C.—Cases written off the Dispensary Register as												
(*a*) Recovered	4	5	3	2	9	7	5	1	13	12	8	3
(*b*) Non-tuberculous (including any such cases previously diagnosed and entered on the Dispensary Register as tuberculous)	...	...	...	...	...	...	...	...	53	71	330	287
D.—Number of Cases on Dispensary Register on December 31st:—												
(*a*) Definitely tuberculous	230	167	62	60	23	26	56	48	253	193	118	108
(*b*) Diagnosis not completed	...	...	...	...	...	...	...	...	5	5	9	1

* i.e., remaining undiagnosed on 31st Dec. [see Memo. 37/T (Revised), p. 10, Sec. II., Note 4].

1. Number of cases on Dispensary Register on January 1st	724
2. Number of cases transferred from other areas and cases returned after discharge under Head 3 in previous years	33
3. Number of cases transferred to other areas, cases not desiring further assistance under the scheme, and cases "lost sight of"	107
4. Cases written off during the year as Dead (all causes)	104
5. Number of attendances at the Dispensary (including Contacts)	3193
6. Number of Insured Persons under Domiciliary Treatment on the 31st December	128
7. Number of consultations with medical practitioners:—	
(a) Personal	50
(b) Other	101
8. Number of visits by Tuberculosis Officers to homes (including personal consultations)	195
9. Number of visits by Nurses or Health Visitors to homes for Dispensary purposes	1212
10. Number of:—	
(a) Specimens of sputum, etc., examined	287
(b) X-ray examinations made in connection with Dispensary work.	59
11. Number of "Recovered" cases restored to Dispensary Register, and included in A (a) and A (b) above	1
12. Number of "T.B. plus" cases on Dispensary Register on December 31st	154

(B) Number of Dispensaries for the treatment of Tuberculosis (excluding centres used only for special forms of treatment).

Provided by the Council	9
Provided by Voluntary Bodies	0

*(C) Number of beds available for the treatment of Tuberculosis on the 31st December in Institutions belonging to the Council, Joint Committee, and its Constituent Authorities.

Name of Institution.	For Pulmonary Cases.		For Non-Pulmonary Cases.		Total.
	Adults.	Children under 15.	Adults.	Children under 15.	
Blencathra Sanatorium	20	—	—	—	20
Stannington Sanatorium	—	9	—	2	11
Westmorland Sanatorium	8	—	—	—	8
St. Fechan's Sanatorium	—	4	—	—	4
Shropshire Orthopædic	—	—	3	2	5
Ethel Hedley, Windermere	—	—	—	7	7

* All institutions belonging to the Authority which are being used for the treatment of tuberculosis are to be included. Any of them which have not been appropriated for Public Health purposes and are being administered by a Public Assistance Committee are to be shown separately under the title of "Poor Law Institutions."

"Numbers of beds available" means the total number of beds in the Institution used for the purpose, whether they are all occupied or not, and whether they are occupied by patients from the area of the Authority, or are leased to or used by other Authorities.

(D) Return showing the extent of Residential Treatment and Observation during the year in Institutions (other than Poor Law Institutions) approved for the treatment of Tuberculosis.

Number of doubtfully tuberculous cases admitted for observation—

	In Institutions on Jan. 1st. (1)	Admitted during the year. (2)	Discharged during the year. (3)	Died in the Institutions. (4)	In Institutions on Dec. 31st. (5)
Adult Males	—	—	—	—	—
Adult Females	—	2	2	—	—
Children	—	12	9	—	3
Total	—	14	11	—	3

Number of definitely tuberculous patients admitted for treatment—

	In Institutions on Jan. 1st. (1)	Admitted during the year. (2)	Discharged during the year. (3)	Died in the Institutions. (4)	In Institutions on Dec. 31st. (5)
Adult Males	13	34	35	—	12
Adult Females	13	51	46	3	15
Children	23	37	39	1	20
Total	49	122	120	4	47
Grand Total	49	136	131	4	50

(E) Return showing the extent of Residential Treatment provided during the year in Poor Law Institutions for persons chargeable to the Council and Constituent Authorities of the Joint Committee.

Number of patients suffering from pulmonary tuberculosis admitted for treatment—

	In Institutions on Jan. 1st.	Admitted during the year.	Discharged during the year.	Died in the Institutions.	In Institutions on Dec 31st.
Adult Males	—	5	1	1	3
Adult Females	—	3	1	2	—
Children	—	—	—	—	—
Total	—	8	2	3	3

Number of patients suffering from non-pulmonary tuberculosis admitted for treatment—

	In Institutions on Jan. 1st.	Admitted during the year.	Discharged during the year.	Died in the Institutions.	In Institutions on Dec. 31st.
Adult Males	—	—	—	—	—
Adult Females	—	—	—	—	—
Children	—	1	1	—	—
Total	—	1	1	—	—
Grand Total	—	9	3	3	3

This table is intended to show the extent of treatment provided by the Authority additional to that provided by them under the Public Health Acts.

(F) Return showing the results of observation of doubtfully tuberculous cases discharged during the year from Institutions approved for the treatment of Tuberculosis.

Diagnosis on discharge from observation.	For Pulmonary Stay over 4 weeks.			For Non-Pulmonary Stay over. 4 weeks.			Totals.		
	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.
Tuberculous	—	—	1	—	—	—	—	—	1
Non-tuberculous	—	—	2	—	—	2	—	—	4
Doubtful	—	—	4	—	2	—	—	2	4
Totals	—	—	7	—	2	2	—	2	9

(G) Return showing the immediate results of treatment of definitely tuberculous patients discharged during the year from Institutions approved for the treatment of Tuberculosis.

Classification on admission to the Institution.		Condition at time of Discharge.	Duration of Residential Treatment in the Institution.												
			Under 3 months.			3—6 months.			6—12 months.			More than 12 mths.			Total.
			M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	M.	F.	Ch.	
Pulmonary Tuberculosis.	Class T.B. minus.	Quiescent	...	2	...	5	3	12	...	...	2	...	...	...	24
		Not quiescent ...	3	4	1	3	3	2	1	2	2	...	...	1	22
		Died in Institution	...	...	...	...	...	...	...	...	...	...	...	...	...
	Class T.B. plus Group 1.	Quiescent	...	...	...	...	...	...	...	...	...	...	...	...	...
		Not quiescent ...	...	...	...	3	4	...	...	...	...	...	...	1	8
		Died in Institution	...	...	...	...	...	...	...	...	...	...	...	...	...
	Class T.B. plus Group 2.	Quiescent	...	...	...	2	2	...	1	...	...	...	...	...	5
		Not quiescent ...	4	4	...	6	10	1	2	7	...	...	...	1	35
		Died in Institution	...	...	...	...	1	...	...	...	...	...	...	...	1
	Class T.B. plus Group 3.	Quiescent	...	...	...	...	...	...	...	...	...	...	...	...	...
		Not quiescent ...	...	1	...	...	1	...	1	...	...	1	...	1	5
		Died in Institution	...	2	...	...	...	...	...	...	...	...	...	...	2
Non-Pulmonary Tuberculosis.	Bones and Joints.	Quiescent	...	1	2	...	...	...	1	...	3	...	...	1	8
		Not quiescent ...	...	...	...	2	...	...	...	2	3	...	...	1	8
		Died in Institution	...	...	...	...	...	1	...	...	...	...	...	...	1
	Abdominal.	Quiescent	...	...	...	...	...	1	...	...	1	...	...	...	2
		Not quiescent ...	...	...	...	...	...	1	...	..	...	...	...	...	1
		Died in Institution	...	...	...	...	...	...	...	...	...	...	...	...	...
	Peripheral Glands.	Quiescent	...	...	...	...	...	2	...	...	...	...	...	...	2
		Not quiescent ...	...	...	...	...	...	...	...	...	...	...	...	...	...
		Died in Institution	...	...	...	...	...	...	...	...	...	...	...	...	...

Form T. 137

PUBLIC HEALTH (TUBERCULOSIS) REGULATIONS, 1930

PART I.—Summary of Notifications during the period from the 28th December, 1930, to the 2nd January, 1932, in the area of the County of Cumberland (to which this Return relates).

Formal Notifications.

Number of Primary Notifications of New Cases of Tuberculosis.

Age Periods.	0—	1—	5—	10—	15—	20—	25—	35—	45—	55—	65—	Total (all ages).	Total Notifications.
Pulmonary—													
Males ...	1	2	5	10	15	13	28	16	17	6	6	119	122
Females ...	—	1	6	7	19	18	33	25	7	7	4	127	132
Non-pulmonary—													
Males ...	2	4	10	6	4	5	4	2	1	—	—	38	39
Females ...	2	4	14	17	6	5	5	1	—	1	1	56	56

SUPPLEMENTAL RETURN.

PART II.—New cases of Tuberculosis coming to the knowledge of the Medical Officer of Health during the above-mentioned period, otherwise than by formal notification.

Age Periods.	0—	1—	5—	10—	15—	20—	25—	35—	45—	55—	65—	Total
Pulmonary—												
Males ...	—	—	—	—	1	2	2	2	2	—	1	10
Females ...	—	—	—	—	1	1	6	—	2	—	1	11
Non-pulmonary—												
Males ...	—	2	2	1	—	1	—	1	—	—	—	7
Females ...	—	1	1	1	—	1	1	—	—	1	—	6

The source or sources from which information as to the above-mentioned cases was obtained should be stated below:—

Source of Information.	No. of Cases. Pulmonary.	Non-Pulmonary.
Death Returns—		
From local Registrars	13	7
Transferable Deaths from Registrar General	3	5
Posthumous Notifications	—	—
Transfers from other areas (other than transferable deaths)	5	2
Other Sources, if any (specify)	—	—

PART III. NOTIFICATION REGISTER.

	Pulmonary. M.	F.	Ttl.	Non-pulmonary. M.	F.	Ttl	Total Cases
Number of cases of tuberculosis remaining at the 31st December, 1931, on the Registers of Notifications kept by District Medical Officers of Health in the County	562	506	1068	274	227	501	1569
Number of cases removed from the Register(s) during the year by reason *inter alia* of—							
1. Withdrawal of notification	1	6	7	2	1	3	10
2. Recovery from the disease	20	26	46	14	11	25	71
3. Death	110	75	185	11	21	32	217

PUBLIC HEALTH (VENEREAL DISEASES) REGULATIONS, 1916.

Report of the Assistant Medical Officer (Venereal Diseases) for the Year ended 31st December, 1931.

During the year 611 persons were dealt with at the Treatment Centres at Carlisle and Whitehaven, of whom 387 attended for the first time, and 22 were re-admitted suffering from the same infection after ceasing to attend or having been transferred to other Treatment Centres in a previous year.

Of all cases 118 were not suffering from Venereal Diseases, leaving 493, a decrease of 11 in the total number under treatment or observation for Venereal Disease as compared with the year 1930.

The attendances at the Medical Officer's Clinics were 4,158, an increase of 162, while the attendances for intermediate treatment were 1,498, a decrease of 106.

The total attendances were 5,656, an increase of 56.

County or County Borough in which Patients resided.	New Cases.	Attendances, all cases.
Cumberland	222 ...	2476
Carlisle	117 ...	2976
Westmorland	5 ...	46
Scotland	7 ...	52
Northumberland	4 ...	36
Durham County	1 ...	10
Newcastle	2 ...	22
Cheshire	1 ...	7
Leeds	1 ...	10
Gateshead	1 ...	3
Ireland	1 ...	3
Manchester	1 ...	1
London	— ...	2
Staffordshire	1 ...	2
Birmingham	1 ...	1
Nottingham	1 ...	6
Bolton	1 ...	2
West Riding	— ...	1
	367 ...	5656

Pathological Examinations.

All Wassermann Tests were carried out at the Public Health Laboratory, Manchester. Of these 490 were done for patients attending the Clinics, and 58 for patients under private treatment by Practitioners in Cumberland and Carlisle.

15 more Wassermann Tests in connection with the Clinics were done compared with 1930.

Of Bacteriological Tests 82 were done by the Medical Officer at the Clinics, 167 at an approved Laboratory (the Cumberland Pathological Laboratory) in connection with the Clinics, and 12 for private practitioners.

Approved Arsenobenzene Compounds.

These were supplied free of charge to any practitioner on the approved list who applied. The number of doses issued in this way was 136.

At the Clinics 1,654 doses were given, mostly by the intravenous method. Of these 991 were for patients residing in Cumberland, 613 for Carlisle, and 50 for other Areas.

It should be noted that there was an increase of 354 injections for Cumberland, 52 for Carlisle, and a decrease of 2 for other Areas compared with 1930. This must necessarily have a considerable bearing on the estimates of expenditure in future.

It is partly accounted for by the increasing number of persons under treatment for Syphilis, especially in Cumberland, and partly by fact that it is now generally recognised that much more prolonged treatment is necessary than was thought to be required a few years ago.

In addition to the preparations enumerated in the report for 1930, Kharsulphan (B.W. & Co.) was used in a few cases.

Any approved preparation asked for is supplied to Medical Practitioners.

Treatment Centres.

1. *Carlisle Centre.*

No alteration was made in the premises at the Cumberland Infirmary or hours of the Clinics.

A plan and estimate for converting the old Out-patient Department at the Infirmary into a Venereal Diseases Out-patient Clinic were prepared by the Architect of the Infirmary, and have been approved by the Venereal Diseases Joint Sub-Committee.

At the end of the year it was still waiting for the approval of the Management of the Infirmary and the Ministry of Health.

The Management of the Infirmary has definitely stated that it is unable to provide any in-patient accommodation.

Intermediate treatment for female patients was begun in October, 1931, but the financial arrangement between the Local Authorities and the Infirmary was still under discussion at the end of the year.

The old agreement between the Local Authorities and the Cumberland Infirmary having expired, a new agreement has to be drawn up. At the end of the year this had not yet been signed.

During the year 388 patients were dealt with, the same number as in 1930. 222 attended for the first time, 16 were re-admitted, making 238, a decrease of 35. The total attendances were 4,208, a decrease of 13, but at the Medical Officer's Clinics there was an increase of 99 attendances, the decrease in the total being due to a falling off in the attendances for intermediate treatment of Gonorrhœa in the male. This is accounted for by the number of new cases of Male Gonorrhœa residing in Carlisle having fallen from 68 in 1930 to 52 in 1931.

It is hoped that when the new Clinic is opened with better facilities for intermediate treatment, a larger number of men in Carlisle will be induced to come to the Infirmary for treatment. At the same time it is satisfactory to note that the figures are a clear indication that Gonorrhœa in Carlisle is becoming less prevalent. The institution of intermediate treatment for women, by attracting larger numbers of young women to the Clinics and by shortening the ineffective period, will undoubtedly further help to reduce the number of new infections in the male.

The incidence of Gonorrhœa in that part of the County served by the Cumberland Infirmary fell from 56

new cases in 1930 to 32 in 1931 (35 in 1929.) It is satisfactory that the marked rise in 1930 was not maintained.

Recent infections with Syphilis fell from 30 to 17. 1,024 injections of Arsenobenzene Compounds were given (769 in 1930) and 317 Wassermann Tests carried out (318 in 1930).

2. *Whitehaven Centre.*

Clinics were held at the Whitehaven and West Cumberland Hospital at the same hours as in former years, namely, one afternoon session for Women and Children, and one evening session for Men, one day a week.

There was a further increase of 69 in the total attendances, which amounted to 1,448. The arrangements for dealing with the number are quite inadequate. The necessary improvements were detailed in the report for 1930, but no steps were taken to remedy the very unsatisfactory state of the Clinics.

As there is no other available accommodation in the hospital, the additional rooms required can only be obtained by building.

The additional service required could be obtained by relieving the Medical Officer of some of his other duties, thus giving him two days at Whitehaven instead of one each week.

The additional nursing and clerical services required and the part-time service of a Medical Orderly could be obtained by arrangement with the Hospital Management, but it is obvious that until there is a place to work in there is no use in arranging additional service, except by extending the present Clinics to two days a week instead of one.

The number of patients dealt with was 223, compared with 202 in 1930. The number of new cases was 155 compared with 128 in 1930, and there were 6 re-admissions (12 in 1930). This increase in new cases does not indicate an increase in Venereal Diseases in Cumberland, and is entirely accounted for by an increase of 28 in the number sent for diagnosis and found to be non-venereal, but it does mean a great deal more work done and time spent at the Clinic. The usefulness of this work is beyond question.

Attendances were 1,448, and except 6, all received individual attention by the Medical Officer. This is an increase of 69 compared with 1930.

New cases of Gonorrhœa were 59, an increase of 4. New cases of Syphilis were 24, a decrease of 3.

630 doses of Arsenobenzene Compounds were given and 173 Wassermann Tests were carried out.

A. C. B. McMurtrie,
Asst. M.O.H. (V.D.)

Form V.D. (R) (revised).

Return relating to all persons who were treated at the Treatment Centre at the Cumberland Infirmary, Carlisle, during the year ended 31st December, 1931.

	Syphilis.		Soft Chancre.		Gonorrhœa.		Conditions other than venereal.		Totals.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
1. Number of cases on 1st January under treatment or observation	43	33	0	0	50	13	1	0	94	46
2. Number of cases removed from the register during any previous year which returned during the year under report for treatment or observation of the same infection	4	3	0	0	4	4	0	1	8	8
3. Number of cases dealt with for the first time during the year under report (exclusive of cases under Item 4) suffering from:—										
Syphilis, primary	10	2	—	—	—	—	—	—	10	2
,, secondary	3	2	—	—	—	—	—	—	3	2
,, latent in 1st year of infection	0	0	—	—	—	—	—	—	0	0
,, all later stages	10	11	—	—	—	—	—	—	10	11
,, congenital	7	8	—	—	—	—	—	—	7	8
Soft Chancre	—	—	14	0	—	—	—	—	14	0
Gonorrhœa, 1st year of infection	—	—	—	—	82	11	—	—	82	11
,, later	—	—	—	—	4	3	—	—	4	3
Conditions other than venereal	—	—	—	—	—	—	29	19	29	19
4. Number of cases dealt with for the first time during the year under report known to have received treatment at other Centres for the same infection	6	2	0	0	9	0	0	0	15	2
TOTALS OF ITEMS 1, 2, 3 & 4	83	61	14	0	149	31	30	20	276	112
5. Number of cases discharged after completion of treatment and final tests of cure (see Item 15)	1	2	6	0	32	9	30	20	69	31
6. Number of cases which ceased to attend before completion of treatment and were, on first attendance, suffering from:—										
Syphilis, primary	7	1	—	—	—	—	—	—	7	1
,, secondary	5	2	—	—	—	—	—	—	5	2
,, latent in 1st year of infection	0	1	—	—	—	—	—	—	0	1
,, all later stages	3	3	—	—	—	—	—	—	3	3
,, congenital	3	4	—	—	—	—	—	—	3	4
Soft Chancre	—	—	4	0	—	—	—	—	4	0
Gonorrhœa, 1st year of infection	—	—	—	—	28	5	—	—	28	5
,, later	—	—	—	—	7	2	—	—	7	2
7. Number of cases which ceased to attend after completion of treatment but before final tests of cure (see Item 15)	2	3	1	0	34	3	—	—	37	6
8. Number of cases transferred to other centres or to institutions, or to care of private practitioners	8	4	0	0	11	4	—	—	19	8
9. Number of cases remaining under treatment or observation on 31st December	54	41	3	0	37	8	0	0	94	49
TOTALS OF ITEMS 5, 6, 7, 8 & 9 (These totals should agree with those of Items 1, 2, 3 and 4)	83	61	14	0	149	31	30	20	276	112
10. Number of cases in the following stages of syphilis included in Item 6 which failed to complete one course of treatment:—										
Syphilis, primary	3	0	—	—	—	—	—	—	3	0
,, secondary	2	0	—	—	—	—	—	—	2	0
,, latent in 1st year of infection	0	0	—	—	—	—	—	—	0	0
,, all later stages	1	0	—	—	—	—	—	—	1	0
,, congenital	1	1	—	—	—	—	—	—	1	1
11. Number of attendances:—										
(*a*) for individual attention of the medical officers	837	739	37	0	876	145	43	39	1793	923
(*b*) for intermediate treatment, e.g., irrigation, dressing	52	0	0	0	1327	111	2	0	1381	111
TOTAL ATTENDANCES	889	739	37	0	2203	256	45	39	3174	1034
12. In-patients:—										
(*a*) Total number of persons admitted for treatment during the year	—	—	—	—	—	—	—	—	—	—
(*b*) Aggregate number of "in-patient days" of treatment given	—	—	—	—	—	—	—	—	—	—

	Under 1 year.		1 and under 5 years.		5 and under 15 years.		15 years and over.		Totals.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
13. Number of cases of congenital syphilis in Item 3 above classified according to age periods	1	1	1	1	3	1	2	5	7	8

Form V.D. (R) (revised).

Return relating to all persons who were treated at the Treatment Centre at Whitehaven and West Cumberland Hospital during the year ended the 31st December, 1931.

	Syphilis.		Soft Chancre.		Gonorrhœa.		Conditions other than venereal.		Totals.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
1. Number of cases on 1st January under treatment or observation	23	14	1	0	20	4	0	0	44	18
2. Number of cases removed from the register during any previous year which returned during the year under report for treatment or observation of the same infection	1	1	0	0	2	2	0	0	3	3
3. Number of cases dealt with for the first time during the year under report (exclusive of cases under Item 4) suffering from:—										
Syphilis, primary	5	1	—	—	—	—	—	—	5	1
,, secondary	6	1	—	—	—	—	—	—	6	1
,, latent in 1st year of infection	0	0	—	—	—	—	—	—	0	0
,, all later stages	4	2	—	—	—	—	—	—	4	2
,, congenital	2	3	—	—	—	—	—	—	2	3
Soft Chancre	—	—	3	0	—	—	—	—	3	0
Gonorrhœa, 1st year of infection	—	—	—	—	42	12	—	—	42	12
,, later	—	—	—	—	2	1	—	—	2	1
Conditions other than venereal	—	—	—	—	—	—	27	41	27	41
4. Number of cases dealt with for the first time during the year under report known to have received treatment at other Centres for the same infection	0	1	0	0	1	1	0	0	1	2
Totals of Items 1, 2, 3 & 4	41	23	4	0	67	20	27	41	139	84
5. Number of cases discharged after completion of treatment and final tests of cure (see Item 15)	1	0	1	0	16	4	27	41	45	45
6. Number of cases which ceased to attend before completion of treatment and were, on first attendance, suffering from:—										
Syphilis, primary	6	1	—	—	—	—	—	—	6	1
,, secondary	1	1	—	—	—	—	—	—	1	1
,, latent in 1st year of infection	0	0	—	—	—	—	—	—	0	0
,, all later stages	4	3	—	—	—	—	—	—	4	3
,, congenital	2	1	—	—	—	—	—	—	2	1
Soft Chancre	—	—	2	0	—	—	—	—	2	0
Gonorrhœa, 1st year of infection	—	—	—	—	15	7	—	—	15	7
,, later	—	—	—	—	0	0	—	—	0	0
7. Number of cases which ceased to attend after completion of treatment but before final tests of cure (see Item 15)	2	1	0	0	10	4	—	—	12	5
8. Number of cases transferred to other centres or to institutions, or to care of private practitioners	1	2	0	0	6	4	—	—	7	6
9. Number of cases remaining under treatment or observation on 31st December	24	14	1	0	20	1	0	0	45	15
Totals of Items 5, 6, 7, 8 & 9 (These totals should agree with those of Items 1, 2, 3 and 4)	41	23	4	0	67	20	27	41	139	84
10. Number of cases in the following stages of syphilis included in Item 6 which failed to complete one course of treatment:—										
Syphilis, primary	5	1	—	—	—	—	—	—	5	1
,, secondary	1	0	—	—	—	—	—	—	1	0
,, latent in 1st year of infection	0	0	—	—	—	—	—	—	0	0
,, all later stages	2	1	—	—	—	—	—	—	2	1
,, congenital	2	0	—	—	—	—	—	—	2	0
11. Number of attendances:—										
(*a*) for individual attention of the medical officers	501	324	6	0	403	112	41	55	951	491
(*b*) for intermediate treatment, e.g., irrigation, dressing	0	0	0	0	6	0	0	0	6	0
Total Attendances	501	324	6	0	409	112	41	55	957	491
12. In-patients:—										
(*a*) Total number of persons admitted for treatment during the year	—	—	—	—	—	—	—	—	—	—
(*b*) Aggregate number of "in-patient days" of treatment given	—	—	—	—	—	—	—	—	—	—

	Under 1 year.		1 and under 5 years		5 and under 15 years.		15 years and over.		Totals.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
13. Number of cases of congenital syphilis in Item 3 above classified according to age periods	1	0	0	0	1	2	0	1	2	3

Form V.D. (R) (revised).

Return relating to all persons who were treated at the Treatment Centres at Carlisle and Whitehaven during the year ended the 31st December, 1931.

	Syphilis		Soft Chancre.		Gonorrhœa.		Conditions other than venereal.		Totals.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
1. Number of cases on 1st January under treatment or observation	66	47	1	0	70	17	1	0	138	64
2. Number of cases removed from the register during any previous year which returned during the year under report for treatment or observation of the same infection	5	4	0	0	6	6	0	1	11	11
3. Number of cases dealt with for the first time during the year under report (exclusive of cases under Item 4) suffering from:—										
Syphilis, primary	15	3	—	—	—	—	—	—	15	3
,, secondary	9	3	—	—	—	—	—	—	9	3
,, latent in 1st year of infection	0	0	—	—	—	—	—	—	0	0
,, all later stages	14	13	—	—	—	—	—	—	14	13
,, congenital	9	11	—	—	—	—	—	—	9	11
Soft Chancre	—	—	17	0	—	—	—	—	17	0
Gonorrhœa, 1st year of infection	—	—	—	—	124	23	—	—	124	23
,, later	—	—	—	—	6	4	—	—	6	4
Conditions other than venereal	—	—	—	—	—	—	56	60	56	60
4. Number of cases dealt with for the first time during the year under report known to have reeeived treatment at other Centres for the same infection	6	3	0	0	10	1	0	0	16	4
Totals of Items 1, 2, 3 & 4	124	84	18	0	216	51	57	61	415	196
5. Number of cases discharged after completion of treatment and final tests of cure (see Item 15)	2	2	7	0	48	13	57	61	114	76
6. Number of cases which ceased to attend before completion of treatment and were, on first attendance, suffering from:—										
Syphilis, primary	13	2	—	—	—	—	—	—	13	2
,, seeondary	6	3	—	—	—	—	—	—	6	3
,, latent in 1st year of infection	0	1	—	—	—	—	—	—	0	1
,, all later stages	7	6	—	—	—	—	—	—	7	6
,, congenital	5	5	—	—	—	—	—	—	5	5
Soft Chancre	—	—	6	0	—	—	—	—	6	0
Gonorrhœa, 1st year of infeetion	—	—	—	—	43	12	—	—	43	12
,, later	—	—	—	—	7	2	—	—	7	2
7. Number of cases which ceased to attend after completion of treatment but before final tests of cure (see Item 15)	4	4	1	0	44	7	—	—	49	11
8. Number of cases transferred to other centres or to institutions, or to eare of private practitioners	9	6	0	0	17	8	—	—	26	14
9. Number of cases remaining under treatment or observation on 31st December	78	55	4	0	57	9	0	0	139	64
Totals of Items 5, 6, 7, 8 & 9 (These totals should agree with those of Items 1, 2, 3 and 4)	124	84	18	0	216	51	57	61	415	196
10. Number of cases in the following stages of syphilis included in Item 6 which failed to complete one course of treatment:—										
Syphilis, primary	8	1	—	—	—	—	—	—	8	1
,, secondary	3	0	—	—	—	—	—	—	3	0
,, latent in 1st year of infeetion	0	0	—	—	—	—	—	—	0	0
,, all later stages	3	1	—	—	—	—	—	—	3	1
,, congenital	3	1	—	—	—	—	—	—	3	1
11. Number of attendanees:—										
(*a*) for individual attention of the medical officers	1338	1063	43	0	1279	257	84	94	2744	1414
(*b*) for intermediate treatment, e.g., irrigation, dressing	52	0	0	0	1333	111	2	0	1387	111
Total Attendances	1390	1063	43	0	2612	368	86	94	4131	1525
12. In-patients:—										
(*a*) Total number of persons admitted for treatment during the year	—	—	—	—	—	—	—	—	—	—
(*b*) Aggregate number of "in-patient days" of treatment given	—	—	—	—	—	—	—	—	—	—

	Under 1 year.		1 and under 5 years.		5 and under 15 years.		15 years and over.		Totals.	
	M.	F.	M.	F.	M	F.	M.	F.	M.	F.
13. Number of cases of congenital syphilis in Item 3 above classified according to age periods	2	1	1	1	4	3	2	6	9	11

Causes of Death in the Administrative Areas in the County of Cumberland, 1931.

Causes of Death.	Workington. M.B. 03 M.	F.	Arlecdon and Frizington. U.D 04 M.	F.	Aspatria. U.D. 05 M.	F.	Cleator Moor U.D. 06 M.	F.	Cockermouth. U.D. 07 M.	F.	Egremont. U.D. 14 M.	F.	Harrington. U.D. 15 M.	F.	Holme Cultram U.D. 16 M.	F.	Keswick. U.D. 17 M.	F.	Maryport. U.D. 24 M.	F.	Millom. U.D. 25 M.	F.	Penrith. U.D. 26 M.	F.	Whitehaven M.B. 27 M.	F.	Wigton. U.D 34 M.	F.	Aggregate of U.D.'s. M.	F.	Alston with Garrigill. R.D. 08 M.	F.	Bootle. R.D. 09 M.	F.	Brampton. R.D. 18 M.	F.	Carlisle. R.D. 19 M.	F.	Cockermouth. R.D. 26 M.	F.	Longtown. R.D. 29 M.	F.	Penrith. R.D. 38 M.	F.	Whitehaven. R.D. 39 M.	F.	Wigton. R.D. 48 M.	F.	Aggregate of R.D.'s. M.	F.
All Causes	177	154	37	23	14	15	61	45	40	48	42	52	29	28	34	24	32	33	75	77	69	46	57	61	176	131	23	22	866	759	21	21	45	46	54	56	87	79	128	115	33	40	90	80	73	77	56	87	587	601
1 Typhoid and paratyphoid fevers	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	1	—
2 Measles	—	1	1	1	—	—	3	1	—	—	—	1	—	1	—	—	—	—	1	—	—	—	—	—	2	2	—	—	7	7	—	—	—	—	1	—	—	—	—	2	1	1	—	—	—	—	1	2	4
3 Scarlet Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	—	—	—	—	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
4 Whooping cough	—	—	—	—	—	—	2	1	—	—	—	—	—	1	—	1	—	—	1	1	—	—	2	—	—	—	—	—	5	4	—	—	—	—	1	—	1	2	—	1	—	—	1	—	3	—	3	7
5 Diphtheria	—	1	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	1	1	—	—	—	—	—	—	—	2	1	—	—	—	—	—	—	—	1	—	—	—	—	1	—	—	1	1
6 Influenza	7	5	—	1	—	—	—	—	1	2	2	2	—	1	1	—	—	1	3	3	5	1	—	3	2	—	—	20	20	—	—	2	1	—	2	2	—	—	—	2	3	2	4	1	2	9	12
7 Encephalitis lethargica	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	1	1	1	—	—	—	2	2	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	1
8 Cerebro-spinal fever	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	1	1	—	—	—	—	—	—	4	—	—	—	—	—	1	—	—	—	5	—
9 Tuberculosis of respiratory system	15	15	3	4	—	1	8	2	3	2	4	7	1	1	—	—	2	1	1	7	3	1	3	3	18	12	2	1	63	54	1	2	2	—	1	—	7	3	5	4	2	1	2	1	7	1	3	2	30	14
10 Other tuberculous diseases	2	10	—	1	—	—	1	—	—	—	1	—	1	—	1	—	—	2	—	—	2	—	—	—	3	5	—	—	11	18	—	—	1	—	1	1	—	1	—	—	3	—	1	—	1	—	—	2	7	4
11 Syphilis	—	1	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	1	—	—	1	3	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	1	—
12 General paralysis of the insane, tabes dorsalis	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—
13 Cancer, malignant disease	27	25	2	2	1	1	6	3	3	4	6	10	4	7	5	6	3	3	7	10	6	8	3	6	12	16	3	3	88	104	3	3	8	10	8	4	17	9	22	19	2	4	9	14	6	11	4	3	79	77
14 Diabetes	1	2	—	—	—	1	1	1	—	1	—	1	2	—	—	—	1	1	1	1	—	1	2	1	1	2	1	1	8	13	1	—	—	—	1	—	1	—	2	2	—	—	1	1	1	1	2	2	8	7
15 Cerebral hæmorrhage, &c.	12	5	1	2	2	—	3	4	—	—	3	4	2	3	—	1	3	2	6	6	1	2	2	2	6	8	—	1	41	40	2	—	2	5	5	5	3	11	7	9	3	3	6	4	6	3	5	10	39	50
16 Heart disease	14	25	3	3	5	4	4	15	11	15	6	11	4	7	13	7	9	5	19	19	9	6	9	21	32	25	5	5	143	168	5	5	9	11	15	14	21	26	21	21	5	12	19	12	18	8	8	19	121	128
17 Aneurysm	1	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	2	1	—	—	—	—	—	—	1	—	—	—	—	—	—	—	1	—	2	—
18 Other circulatory diseases	6	4	—	—	—	1	—	3	4	1	—	—	1	1	—	1	3	4	3	3	1	8	2	1	1	2	—	29	18	—	—	2	7	5	5	3	6	7	7	2	5	11	13	1	10	3	6	34	59
19 Bronchitis	5	3	1	1	1	2	5	1	2	1	2	3	2	3	1	2	1	3	9	5	7	7	2	3	8	7	—	2	49	43	1	2	2	3	5	5	3	1	4	2	—	2	—	1	4	9	2	4	21	29
20 Pneumonia (all forms)	4	5	4	3	1	1	7	3	1	3	1	1	3	1	—	—	2	1	6	3	5	2	4	3	18	19	—	2	56	47	1	—	1	—	3	2	4	4	7	6	2	1	5	3	6	4	—	2	29	22
21 Other respiratory diseases	7	1	2	—	—	—	1	1	—	3	2	—	—	—	1	—	1	1	1	4	1	1	3	—	2	1	—	1	21	13	1	—	—	—	—	3	1	1	5	2	—	1	3	1	3	—	—	1	13	9
22 Peptic ulcer	3	1	1	—	—	—	1	—	1	—	—	—	—	—	1	1	1	—	—	—	—	—	—	—	—	—	—	—	8	3	—	1	—	—	—	—	1	—	2	—	—	1	1	—	1	—	—	5	4
23 Diarrhœa, &c. (under 2 years)	1	2	—	—	—	—	3	—	—	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	6	3	—	—	—	—	—	—	1	2	—	—	—	—	2	1	—	—	3	3
24 Appendicitis	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	—	1	—	—	1	3	1	—	—	1	—	—	—	—	1	1	—	—	—	—	—	—	1	2	2
25 Cirrhosis of liver	—	—	—	—	—	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	3	—	—	—	—	—	—	—	2	—	—	—	—	1	—	—	—	—	3	—
26 Other diseases of liver, &c.	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	2	—	—	—	—	—	—	1	—	—	1	—	—	—	—	—	—	2	1
27 Other digestive diseases	4	3	—	—	—	—	1	2	—	—	—	—	1	—	2	—	1	1	3	2	—	1	2	3	4	—	—	15	15	—	—	—	1	—	2	5	3	—	2	2	—	3	—	2	2	—	1	3	—	10	19
28 Acute and chronic nephritis	14	11	2	—	1	—	—	2	2	—	1	3	—	—	2	—	2	3	—	2	5	1	1	1	4	2	2	2	36	27	3	3	3	—	1	2	4	—	2	4	1	—	5	7	1	5	5	3	25	24
29 Puerperal sepsis	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	1	—	—	—	1	—	—	—	—	—	—	2
30 Other puerperal causes	—	3	—	—	—	—	—	—	1	—	1	—	—	—	—	—	2	—	1	—	2	—	—	—	2	—	—	—	12	—	—	—	—	—	—	—	1	—	—	—	—	—	1	—	—	—	2	—	4
31 Congenital debility, premature birth, malformations, &c.	14	5	4	1	1	1	3	1	2	3	2	2	3	1	1	1	3	—	6	1	4	2	2	3	8	4	4	—	57	25	—	—	3	—	1	3	2	2	6	4	2	1	5	2	2	3	3	7	24	22
32 Senility	11	7	—	3	—	1	2	2	1	—	2	1	2	—	1	—	—	1	—	1	4	3	1	7	5	5	—	—	29	31	1	2	2	2	2	5	2	4	5	10	1	1	4	7	2	4	3	3	22	38
33 Suicide	2	—	—	—	1	—	—	—	—	—	1	—	1	—	—	—	1	—	1	—	—	—	—	—	—	—	—	—	8	—	—	—	3	—	—	1	1	—	1	—	1	—	1	—	1	1	1	8	3
34 Other violence	11	6	5	—	—	1	2	—	3	1	5	—	—	—	—	—	1	1	1	2	3	1	5	3	33	1	1	—	70	16	1	—	2	1	2	1	1	4	8	1	2	2	1	—	5	1	4	—	26	10
35 Other defined diseases	10	11	7	1	1	1	4	5	3	6	2	3	1	3	3	3	1	4	6	4	7	3	8	2	8	10	1	3	62	59	1	2	1	3	4	—	3	—	11	16	4	1	10	6	2	3	8	8	44	39
36 Causes ill-defined or unknown	2	1	1	—	1	—	3	—	—	—	—	—	—	1	—	3	1	1	2	—	—	—	4	2	—	—	—	—	16	6	—	1	1	1	—	—	—	—	2	—	—	—	—	1	2	3	2	7	6
Special Causes (included in No. 35 above)																																																	
Small-pox	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Poliomyelitis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Polioencephalitis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Deaths of Infants under 1 year — Total	20	12	7	3	2	2	14	1	5	6	2	5	4	3	2	1	4	—	13	5	7	5	5	4	17	16	4	—	106	63	—	—	3	1	4	4	6	4	12	12	3	1	7	3	7	8	6	11	48	44
Deaths of Infants under 1 year — Legitimate	19	12	7	3	2	2	14	1	5	3	2	4	4	3	2	1	3	—	13	4	7	5	5	4	14	16	3	—	100	58	—	—	3	1	2	2	6	2	8	10	2	1	6	3	6	7	4	10	37	36
Deaths of Infants under 1 year — Illegitimate	1	—	—	—	—	—	—	—	—	3	—	1	—	—	—	—	1	—	—	1	—	—	—	—	3	—	1	—	6	5	—	—	—	—	2	2	—	2	4	2	1	—	1	—	1	1	2	1	11	8
Live Births — Total	254	220	53	33	22	21	60	64	47	34	70	47	39	39	48	44	32	22	93	99	68	59	69	68	218	239	29	26	1102	1015	21	20	54	32	62	73	78	78	181	161	61	50	103	97	105	103	97	96	762	710
Live Births — Legitimate	239	218	49	31	19	19	56	59	43	30	66	44	39	38	43	42	32	22	87	89	64	57	66	66	206	234	24	22	1033	971	18	19	53	31	58	66	71	71	166	154	53	45	97	90	101	99	86	85	703	660
Live Births — Illegitimate	15	2	4	2	3	2	4	5	4	4	4	3	—	1	5	2	—	—	6	10	4	2	3	2	12	5	5	4	69	44	3	1	1	1	4	7	7	7	15	7	8	5	6	7	4	4	11	11	59	50
Stillbirths — Total	12	12	3	1	—	—	4	1	3	—	1	2	2	1	2	1	1	2	5	5	7	2	6	3	10	7	—	1	56	38	2	1	3	1	2	1	4	2	6	11	3	4	8	6	3	4	4	2	35	32
Stillbirths — Legitimate	11	11	3	1	—	—	3	1	2	—	1	2	2	—	2	1	1	2	5	4	7	2	6	3	9	7	—	1	52	35	2	1	2	1	—	1	4	1	5	10	3	4	6	6	3	4	4	1	29	29
Stillbirths — Illegitimate	1	1	—	—	—	—	1	—	1	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	1	—	—	—	4	3	—	—	1	—	2	—	—	1	1	1	—	—	2	—	—	—	—	1	6	3
Population	24,810		4,343		3,241		6,611		4,787		6,048		4,142		4,590		4,402		10,190		7,370		8,986		21,270		3,510		114,300		2,645		5,145		7,827		12,080		21,250		5,983		12,220		13,360		10,460		90,970	

Causes of Death at Different Periods of Life in the Administrative County of Cumberland, 1931.

	Causes of Death.	Sex.	Aggregate of Urban Districts. All Ages.	0—	1—	2—	5—	15—	25—	35—	45—	55—	65—	75—	Aggregate of Rural Districts. All Ages.	0—	1—	2—	5—	15—	25—	35—	45—	55—	65—	75—
	All Causes	M	866	106	18	23	31	49	46	53	94	120	176	150	587	48	8	4	13	16	16	25	59	96	140	162
		F	759	63	15	16	28	45	42	24	64	117	159	186	601	44	11	8	16	15	12	24	29	82	142	218
1	Typhoid and paratyphoid fevers	M	1	—	—	—	—	—	—	1	—	—	—	—	1	—	—	—	—	—	—	1	—	—	—	—
		F	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2	Measles	M	7	2	4	—	1	—	—	—	—	—	—	—	2	1	1	—	—	—	—	—	—	—	—	—
		F	7	2	2	1	2	—	—	—	—	—	—	—	4	2	1	—	1	—	—	—	—	—	—	—
3	Scarlet Fever	M	1	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		F	1	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
4	Whooping Cough ...	M	5	3	—	2	—	—	—	—	—	—	—	—	3	—	1	2	—	—	—	—	—	—	—	—
		F	4	1	2	1	—	—	—	—	—	—	—	—	7	4	2	1	—	—	—	—	—	—	—	—
5	Diphtheria	M	2	—	—	1	—	—	—	—	—	—	—	1	1	1	—	—	—	—	—	—	—	—	—	—
		F	1	1	—	—	—	—	—	—	—	—	—	—	1	—	—	—	1	—	—	—	—	—	—	—
6	Influenza	M	20	—	—	—	1	2	3	—	2	2	7	3	9	—	—	—	—	—	—	—	2	2	2	3
		F	20	1	—	1	3	—	1	1	3	5	3	2	12	—	—	—	1	—	—	3	1	2	2	3
7	Encephalitis	M	2	—	—	—	1	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Lethargica	F	2	—	1	—	—	—	—	—	1	—	—	—	1	—	—	—	—	—	—	—	1	—	—	—
8	Cerebro-Spinal Fever ...	M	1	—	—	—	—	1	—	—	—	—	—	—	5	1	—	—	1	—	—	2	—	1	—	—
		F	1	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
9	Tuberculosis of	M	63	—	—	—	2	16	17	11	12	3	1	1	30	—	—	—	1	5	5	5	9	3	1	1
	Respiratory System	F	54	—	—	—	4	21	16	6	1	3	3	—	14	—	—	—	1	4	—	4	1	3	1	—
10	Other Tuberculous ...	M	11	2	2	2	1	1	—	2	1	—	—	—	7	—	1	—	1	—	—	2	—	3	—	—
	Diseases	F	18	3	—	—	5	3	4	—	—	2	1	—	4	—	—	—	3	—	—	—	—	1	—	—
11	Syphilis	M	1	1	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	1	—	—
		F	3	2	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12	General Paralysis of the	M	2	—	—	—	—	—	—	1	—	—	1	—	1	—	—	—	—	—	—	—	—	1	—	—
	Insane, Tabes Dorsalis	F	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
13	Cancer, Malignant ...	M	88	—	—	—	—	—	1	2	14	21	40	10	79	—	—	—	1	1	—	5	6	21	29	16
	Disease	F	104	—	—	—	—	—	1	3	21	34	25	20	77	—	—	—	2	1	3	5	7	21	17	21
14	Diabetes	M	8	—	—	—	—	—	—	1	2	2	2	1	8	—	—	—	—	—	1	—	1	2	4	—
		F	13	—	—	—	—	1	—	1	1	4	4	2	7	—	—	—	—	—	—	—	—	3	4	—
15	Cerebral Hemorrhage, &c.	M	41	—	—	—	—	—	—	2	—	7	18	14	39	—	—	—	—	—	—	—	2	5	14	18
		F	40	—	—	—	—	—	—	—	5	6	12	17	50	—	—	—	—	—	—	1	2	6	18	23
16	Heart Disease	M	143	—	—	—	4	1	3	5	14	26	37	53	121	—	—	—	—	—	—	3	9	18	46	45
		F	168	—	—	—	1	4	6	2	8	27	60	60	128	—	—	—	—	—	2	5	8	19	33	61
17	Aneurysm	M	2	—	—	—	—	—	—	—	1	1	—	—	2	—	—	—	—	—	—	—	—	1	1	—
		F	1	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—
18	Other Circulatory	M	29	—	—	—	—	—	—	—	—	2	13	14	34	1	—	—	—	—	—	—	—	4	9	20
	Diseases	F	18	—	—	—	—	—	1	—	—	2	5	10	59	—	—	—	—	—	—	—	—	6	22	31
19	Bronchitis	M	49	12	4	3	1	—	1	—	2	4	11	11	21	4	—	—	—	—	—	—	1	3	5	8
		F	43	7	—	—	—	—	—	—	1	7	12	16	29	1	1	—	—	—	—	1	1	1	7	17
20	Pneumonia (all forms) ...	M	56	11	3	8	2	4	4	4	8	6	4	2	29	7	1	—	2	1	2	1	5	3	5	2
		F	47	14	5	7	2	4	2	—	3	4	5	1	22	2	5	1	2	1	1	—	—	3	3	4
21	Other Respiratory ...	M	21	—	—	1	2	1	1	1	7	5	1	2	13	—	—	—	—	1	—	1	2	4	2	3
	Diseases	F	13	—	—	—	1	—	1	1	—	1	3	6	9	—	—	1	—	—	—	—	1	1	2	4
22	Peptic Ulcer	M	8	—	—	—	—	—	—	3	1	3	1	—	5	—	—	—	—	—	1	—	2	1	—	1
		F	3	—	—	—	—	—	—	1	—	1	—	1	4	—	—	—	—	—	—	—	1	1	2	—
23	Diarrhœa, etc.	M	6	5	1	—	—	—	—	—	—	—	—	—	3	2	1	—	—	—	—	—	—	—	—	—
		F	8	2	1	2	1	—	1	—	—	—	—	1	6	3	—	1	—	—	1	—	—	—	—	1
24	Appendicitis	M	3	—	—	—	1	—	—	2	—	—	—	—	2	—	—	—	—	—	—	—	2	—	—	—
		F	1	—	—	—	—	—	—	—	1	—	—	—	2	—	—	—	1	—	—	1	—	—	—	—
25	Cirrhosis of Liver ...	M	3	—	—	—	—	—	—	—	1	—	2	—	3	—	—	—	—	—	—	—	—	—	3	—
		F	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
26	Other Diseases of	M	—	—	—	—	—	—	—	—	—	—	—	—	2	—	—	—	—	—	—	—	—	1	1	—
	Liver, etc.	F	2	—	—	—	—	—	—	—	—	—	1	1	1	—	—	—	—	—	—	1	—	—	—	—
27	Other Digestive	M	15	3	1	—	—	—	1	2	—	6	2	—	10	2	—	1	1	1	—	—	1	1	1	2
	Diseases	F	10	2	1	—	2	—	—	—	—	—	2	3	16	4	1	—	1	1	1	—	—	1	3	4
28	Acute and Chronic ...	M	36	—	—	—	1	3	2	—	6	10	10	4	25	—	1	—	—	—	—	—	3	8	5	8
	Nephritis	F	27	—	—	—	—	—	1	—	6	6	8	6	24	—	—	—	1	1	1	—	3	4	5	9
29	Puerperal Sepsis	F	1	—	—	—	—	—	—	1	—	—	—	—	2	—	—	—	—	1	—	1	—	—	—	—
30	Other Puerperal Causes	F	12	—	—	—	—	4	5	3	—	—	—	—	4	—	—	—	—	2	1	1	—	—	—	—
31	Congenital Debility, ... Premature Birth, Mal-	M	57	55	—	—	1	—	—	—	—	1	—	—	21	23	—	—	1	—	—	—	—	—	—	—
	formations, etc.	F	25	24	1	—	—	—	—	—	—	—	—	—	22	22	—	—	—	—	—	—	—	—	—	—
32	Senility	M	29	—	—	—	—	—	—	—	—	1	6	22	22	—	—	—	—	—	—	—	—	—	2	20
		F	31	—	—	—	—	—	—	—	—	1	3	27	38	—	—	—	—	—	—	—	—	—	9	29
33	Suicide	M	8	—	—	—	—	—	2	3	1	2	—	—	8	—	—	—	—	—	3	—	2	2	—	1
		F	—	—	—	—	—	—	—	—	—	—	—	—	3	—	—	—	—	1	—	1	—	1	—	—
34	Other Violence	M	70	1	—	4	7	17	9	9	12	7	2	2	26	2	1	—	3	4	3	1	3	5	4	—
		F	16	—	—	2	2	2	2	—	—	—	1	7	10	3	—	3	—	1	—	—	—	—	—	3
35	Other Defined Diseases	M	62	11	3	1	6	3	2	3	6	7	14	6	44	4	1	1	2	3	1	3	8	6	3	12
		F	59	4	2	2	4	6	1	3	13	11	10	3	39	3	1	1	2	2	2	—	2	8	13	5
36	Causes, Ill-Defined, or ...	M	16	—	—	—	—	—	—	1	4	3	4	4	7	—	—	—	—	—	—	1	1	—	3	2
	Unknown	F	6	—	—	—	—	—	—	—	—	3	1	2	6	—	—	—	—	—	—	—	1	1	1	3